# GLOBAL TENDER ENQUIRY DOCUMENT

FOR PURCHASE OF
MEDICAL EQUIPMENT
FOR SIX AIIMS

UNDER PMSSY Scheme

**FOR**

## GOVT OF INDIA

## MINISTRY OF HEALTH & FAMILY WELFARE

**HLL/PCD/PMSSY/AIIMS-II/01/13–14**

**BY**

# HLL Lifecare Limited

**(A GOVERNMENT OF INDIA ENTERPRISE)**
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## SECTION I

## NOTICE INVITING TENDERS (NIT)
## For Global Tender from
## HLL Lifecare Limited
**(A GOVERNMENT OF INDIA ENTERPRISE)**

Procurement & Consultancy Services Division
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FOR
GOVT OF INDIA
## MINISTRY OF HEALTH & FAMILY WELFARE

**Tender Enquiry No.: HLL/PCD/PMSSY/AIIMS-II/01/13-14** **Dated 17.08.2013**

# NOTICE INVITING TENDERS (NIT)

(1) Procurement & Consultancy Services Division of HLL Lifecare Limited, for and on behalf of Govt. of India, Ministry of Health & Family Welfare, invites sealed tenders, from eligible and qualified tenderers for supply of Medical Equipments for Six All India Institutes of Medical Science (AIIMS) – Bhopal, Bhubaneswar, Jodhpur, Patna, Raipur, Rishikesh, under PMSSY:

| Sl No. | Equipment Name | Qty PER AIIMS | Total Qty. | EMD (Rs.) |
|---|---|---|---|---|
| 1 | CT Scan - 64 Slice | 1 | 6 | 7,200,000 |
| 2 | MRI- 1.5 Tesla<br>[Bhopal & Rishikesh - 1 each] | 1 | 2 | 2,800,000 |
| 3 | ICU Beds | 60 | 360 | 1,800,000 |
| 4 | Pulse oximeter with NIBP and Central Monitor | 20 | 120 | 120,000 |
| 5 | Syringe infusion pump | 90 | 540 | 540,000 |
| 6 | Defibrillator with ECG monitor | 12 | 72 | 576,000 |
| 7 | Fibroscopic Bronchoscope - Adult | 2 | 12 | 288,000 |
| 8 | Ventilator-portable | 10 | 60 | 600,000 |
| 9 | Ventilator high end ( ICU) | 20 | 120 | 3,360,000 |
| 10 | Transport monitor | 10 | 60 | 300,000 |
| 11 | Modular Multi Parameter monitor with central station<br>***(Medical ICU-1 Central Station +12 monitors; Surgical ICU-1 Central Station + 12 monitors)*** | 24***+2*** | 144***+12*** | 1,320,000 |
| 12 | Portable ultrasound with colour Doppler system | 4 | 24 | 864,000 |
| 13 | Colour Doppler echocardiography system | 2 | 12 | 1,440,000 |

| Sl No. | Equipment Name | Qty PER AIIMS | Total Qty. | EMD (Rs.) |
|---|---|---|---|---|
| 14 | Upper GI endoscope | 2 | 12 | 960,000 |
| 15 | Open care system for neonates | 4 | 24 | 120,000 |
| 16 | Hemodialysis machine | 3 | 18 | 288,000 |
| 17 | Operation table with accessories | 4 | 24 | 1,680,000 |
| 18 | Surgical Diathermy with accessories | 5 | 30 | 600,000 |
| 19 | Laparoscopic Surgery Set | 1 | 6 | 720,000 |
| 20 | Anesthesia work station | 4 | 24 | 1,200,000 |
| 21 | Plasma sterilizer | 1 | 6 | 720,000 |
| 22 | Ultrasonic energy cleaner(high load) | 2 | 12 | 480,000 |
| 23 | Paediatric Cystoscope and resectoscope | 1 | 6 | 240,000 |
| 24 | Ultrasonic Cutting and Coagulating Device | 1 | 6 | 240,000 |
| 25 | Digital X-ray Unit (1000 mA) | 1 | 6 | 1,800,000 |
| 26 | Clinical CE/IVD Flow Cytometer | 1 | 6 | 480,000 |

(2) **Tender No.: HLL/PCD/PMSSY/AIIMS-II/01/13-14**

| Sl. No. | Description | Schedule |
|---|---|---|
| i. | Dates of sale of tender enquiry documents | **17.08.2013** to **23.09.2013**, 1600 hrs IST |
| ii. | Place of sale of Tender Enquiry Documents | HLL Lifecare Limited, (A Government of India Enterprise), Procurement & Consultancy Services Division, B-14 A, Sector-62, Noida-201307 |
| iii. | Cost of the Tender Enquiry Document | Rs. 5000/- |
| iv. | Pre Tender Meeting Date & Time | **26.08.2013**, 1100 hrs IST |
| v. | Pre Tender Meeting Venue | Same as 2 (ii) |
| vi. | Closing date & time for receipt of Tender | **24.09.2013**, 1400 hrs IST |
| vii. | Time and date of opening of Techno – Commercial tenders | **24.09.2013**, 1430 hrs IST |
| viii | Venue of Opening of Techno Commercial Tender | Same as 2 (ii) |

3. Interested tenderers may obtain further information about this requirement from the above office selling the documents. Tender Enquiry Documents may be purchased on payment of non-refundable fee of Rs 5000/- per set in the form of account payee Demand Draft/Pay Order/Cashier's Cheque/Banker's Cheque, drawn on a scheduled bank in India, in favour of **"HLL Lifecare Limited"** payable at New Delhi**.**

4. If requested, the Tender Enquiry Documents will be mailed by Registered Post/Speed Post to the domestic tenderers and by international airmail to the foreign tenderers, for which extra expenditure per set will be Rs 100/- for domestic post and Rs 500/- for international airmail. The tenderer is to add the applicable postage cost in the non-refundable fee mentioned in Para 3 above.

5. Tenderer may also download the tender enquiry documents from the web site www.lifecarehll.com or www.eprocure.gov.in/cppp and submit its tender by utilizing the downloaded document, along with the required non-refundable fee as mentioned in Para 3 above.

6. All prospective tenderers may attend the Pre Tender meeting. The venue, date and time indicated in the Para 2 above.

7. Tenderers shall ensure that their tenders, complete in all respects, are dropped in the Tender Box located at **HLL Lifecare Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201307, Uttar Pradesh** on or before the closing date and time indicated in the Para 2 above, failing which the tenders will be treated as late and rejected.

8. In the event of any of the above mentioned dates being declared as a holiday / closed day for the purchase organisation, the tenders will be sold/received/opened on the next working day at the appointed time.

9. The Tender Enquiry Documents are not transferable.

**Head (P&CD)**
**HLL Lifecare Limited**

# SECTION - II

## GENERAL INSTRUCTIONS TO TENDERERS (GIT)
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# GENERAL INSTRUCTIONS TO TENDERERS (GIT)

## A. PREAMBLE

### 1. Definitions and Abbreviations

1.1 The following definitions and abbreviations, which have been used in these documents shall have the meanings as indicated below:

1.2. Definitions:

(i) "Purchaser" means Ministry of Health & Family welfare Govt of India.
(ii) "Tender" means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder.
(iii) "Tenderer" means Bidder/ the Individual or Firm submitting Bids / Quotation / Tender
(iii) "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract.
(iv) "Goods" means the articles, material, commodities, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, medical equipment, industrial plant etc. which the supplier is required to supply to the purchaser under the contract.
(v) "Services" means services allied and incidental to the supply of goods, such as transportation, installation, commissioning, provision of technical assistance, training, after sales service, maintenance service and other such obligations of the supplier covered under the contract.
(vi) "Earnest Money Deposit" (EMD) means Bid Security/ monetary or financial guarantee to be furnished by a tenderer along with its tender.
(vii) "Contract" means the written agreement entered into between the purchaser and/or consignee and the supplier, together with all the documents mentioned therein and including all attachments, annexure etc. therein.
(viii) "Performance Security" means monetary or financial guarantee to be furnished by the successful tenderer for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
(ix) "Consignee" means the Hospital (AIIMS)/Institute/Medical College/ person to whom the goods are required to be delivered as specified in the Contract. If the goods are required to be delivered to a person as an interim consignee for the purpose of despatch to another person as provided in the Contract then that "another" person is the consignee, also known as ultimate consignee.
(x) "Specification" means the document/standard that prescribes the requirement with which goods or service has to conform.
(xi) "Inspection" means activities such as measuring, examining, testing, gauging one or more characteristics of the product or service and comparing the same with the specified requirement to determine conformity.
(xii) "Day" means calendar day.

1.3 Abbreviations:

(i) "TE Document" means Tender Enquiry Document
(ii) "NIT" means Notice Inviting Tenders.
(iii) "GIT" means General Instructions to Tenderers
(iv) "SIT" means Special Instructions to Tenderers
(v) "GCC" means General Conditions of Contract
(vi) "SCC" means Special Conditions of Contract

(vii) "DGS&D" means Directorate General of Supplies and Disposals
(viii) "NSIC" means National Small Industries Corporation
(ix) "PSU" means Public Sector Undertaking
(x) "CPSU" means Central Public Sector Undertaking
(xi) "LSI" means Large Scale Industry
(xii) "SSI" means Small Scale Industry
(xiii) "LC" means Letter of Credit
(xiv) "DP" means Delivery Period
(xv) "BG" means Bank Guarantee
(xvi) "ED" means Excise Duty
(xvii) "CD" means Custom Duty
(xviii) "VAT" means Value Added Tax
(xix) "CENVAT" means Central Value Added Tax
(xx) "CST" means Central Sales Tax
(xxi) "RR" means Railway Receipt
(xxii) "BL" means Bill of Lading
(xxiii) "FOB" means Free on Board
(xxiv) "FCA" means Free Carrier
(xxv) "FOR" means Free On Rail
(xxvi) "CIF" means Cost, Insurance and Freight
(xxvii) "CIP (Destinations)" means Carriage and Insurance Paid up to named port of destination. Additionally the Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.
(xxviii) "DDP" means Delivery Duty Paid named place of destination (consignee site)
(xxix) "INCOTERMS" means International Commercial Terms as on the date of Tender Opening
(xxx) "MOH&FW" means Ministry of Health & Family Welfare, Government of India
(xxxi) "Dte. GHS" means Directorate General and Health Services, MOH&FW.
(xxxii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
(xxxiii) "RT" means Re-Tender.

## 2. Introduction

2.1 The Purchaser has issued these TE documents for purchase of goods and related services as mentioned in Section – VI – "List of Requirements", which also indicates, *interalia,* the required delivery schedule, terms and place of delivery.

2.2 This section (Section II - "General Instruction Tenderers") provides the relevant information as well as instructions to assist the prospective tenderers in preparation and submission of tenders. It also includes the mode and procedure to be adopted by the purchaser for receipt and opening as well as scrutiny and evaluation of tenders and subsequent placement of contract.

2.3 The tenderers shall also read the Special Instructions to Tenderers (SIT) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIT and the SIT, the provisions contained in the SIT shall prevail over those in the GIT.

2.4 Before formulating the tender and submitting the same to the purchaser, the tenderer should read and examine all the terms, conditions, instructions, checklist etc. contained in the TE documents. Failure to provide and/or comply with the required information, instructions etc. incorporated in these TE documents may result in rejection of its tender.

**3. Availability of Funds**

3.1 Expenditure to be incurred for the proposed purchase will be met from the funds available with the purchaser/consignee.

**4. Language of Tender**

4.1 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, shall be written in the English language, unless otherwise specified in the Tender Enquiry. However, the language of any printed literature furnished by the tenderer in connection with its tender may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the tender, the English translation shall prevail**.**

4.2 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, may also be written in the Hindi language, provided that the same are accompanied by English translation, in which case, for purpose of interpretation of the tender etc, the English translations shall prevail.

**5. Eligible Tenderers**

5.1 This invitation for tenders is open to all suppliers who fulfil the eligibility criteria specified in these documents.

**6. Eligible Goods and Services**

6.1 All goods and related services to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term "origin" used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied.

**7. Tendering Expense**

7.1 The tenderer shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender and for subsequent processing the same. The purchaser will, in no case be responsible or liable for any such cost, expenditure etc regardless of the conduct or outcome of the tendering process.

## B. TENDER ENQUIRY DOCUMENTS

**8. Content of Tender Enquiry Documents**

8.1 In addition to Section I – "Notice inviting Tender" (NIT), the TE documents include:

- Section II – General Instructions to Tenderers (GIT)
- Section III – Special Instructions to Tenderers (SIT)
- Section IV – General Conditions of Contract (GCC)
- Section V – Special Conditions of Contract (SCC)
- Section VI – List of Requirements
- Section VII – Technical Specifications
- Section VIII – Quality Control Requirements
- Section IX – Qualification Criteria
- Section X – Tender Form
- Section XI – Price Schedules
- Section XII – Questionnaire
- Section XIII – Bank Guarantee Form for EMD
- Section XIV – Manufacturer's Authorisation Form
- Section XV – Bank Guarantee Form for Performance Security/CMC Security
- Section XVI – Contract Forms A & B

- Section XVII – Proforma of Consignee Receipt Certificate
- Section XVIII – Proforma of Final Acceptance Certificate by the consignee
- Section XIX – Instructions from Ministry of Shipping/ Surface Transport (Annexure 1 & 2)
- Section XX – Check List for the Tenderers
- Section XXI – Consignee List

8.2 The relevant details of the required goods and services, the terms, conditions and procedure for tendering, tender evaluation, placement of contract, the applicable contract terms and, also, the standard formats to be used for this purpose are incorporated in the above-mentioned documents. The interested tenderers are expected to examine all such details etc to proceed further.

**9. Amendments to TE documents**

9.1 At any time prior to the deadline for submission of tenders, the purchaser may, for any reason deemed fit by it, modify the TE documents by issuing suitable amendment(s) to it.

9.2 Such an amendment will be notified in writing by registered/speed post or by fax/telex/e-mail, followed by copy of the same by registered post to all prospective tenderers, which have received the TE documents and will be binding on them.

9.3 In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

**10. Clarification of TE documents**

10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing. The purchaser will respond in writing to such request provided the same is received by the purchaser not later than fifteen days (unless otherwise specified in the SIT) prior to the prescribed date of submission of tender.

## C. PREPARATION OF TENDERS

**11. Documents Comprising the Tender**

11.1 The **Two Tender System**, i.e. "Techno – Commercial Tender" and "Price Tender" prepared by the tenderer shall comprise the following:

**A) <u>Techno – Commercial Tender (Un priced Tender)</u>**

i) Earnest money furnished in accordance with GIT clause 19.1 alternatively, documentary evidence as per GIT clause 19.2 for claiming exemption from payment of earnest money.

ii) Tender Form as per Section X (without indicating any prices).

iii) Documentary evidence, as necessary in terms of clauses 5 and 17 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.

iv) Tenderer/Agent who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form. **<u>While giving authorization to agent , to quote on their behalf, manufacturer has to give the reasons for not quoting directly against this tender.</u>**

v) Power of Attorney in favour of signatory of TE documents and signatory of Manufacturer's Authorisation Form.

vi) Documents and relevant details to establish in accordance with GIT clause 18 that the goods and the allied services to be supplied by the tenderer conform to the requirement of the TE documents.

vii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.
viii) Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
ix) Certificate of Incorporation in the country of origin.
x) Checklist as per Section XX.

**B) Price Tender:**

The information given at clause no. 11.1 A) ii) & viii) above should be reproduced with the prices indicated.

Note:
1. All pages of the Tender should be page numbered and indexed.
2. It is the responsibility of tenderer to go through the TE document to ensure furnishing all required documents in addition to above, if any.

11.2 The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender. Individuals signing the tender or other documents connected with a contract must specify whether he signs as:
i. A 'Sole Proprietor' of the firm or constituted attorney of such Sole Proprietor.
ii. A partner of the firm ,if it be a partnership , in which case he must have authority to quote & to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney;
iii. Constituted attorney of the firm if it is a company.

Note:
1. In case of (ii) above, a copy of the partnership agreement or general power of attorney, in either ,case, attested by a Notary Public should be furnished, or affidavit on stamped paper of all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished.
2. In case of the partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the tender and all other related documents must be signed by every partner of the firm.
3. A person signing the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrantee that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages

11.3 A tender, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.
11.4 Tender sent by fax/telex/cable/electronically shall be ignored.

**12. Tender currencies**

12.1 The tenderer supplying indigenous goods or already imported goods shall quote only in Indian Rupees.
12.2 For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only if such services are to be performed /undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the price schedule and will be payable in Indian Rupees only.

12.3 Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.

**13 Tender Prices**

13.1 The Tenderer shall indicate on the Price Schedule provided under Section XI all the specified components of prices shown therein including the unit prices and total tender prices of the goods and services it proposes to supply against the requirement. All the columns shown in the price schedule should be filled up as required. If any column does not apply to a tenderer, same should be clarified as "NA" by the tenderer.

13.2 If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.

13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached under Section XI.

13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:

13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding price schedule shall be entered separately in the following manner:

a) the price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like sales tax, CST VAT, CENVAT, Custom Duty, Excise Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc;

b) any sales or other taxes and any duties including excise duty, which will be payable on the goods in India if the contract is awarded;

c) charges towards Packing & Forwarding, Inland Transportation, Insurance (local transportation and storage) would be borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Price Schedule;

d) the price of Incidental Services, as mentioned in List of Requirements and Price Schedule;

e) the prices of Turnkey ( if any), a s mentioned in List of Requirements, Technical Specification and Price Schedule; and

f) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.4.2 For goods offered from abroad, the prices in the corresponding price schedule shall be entered separately in the following manner:

a) The price of goods quoted FOB/FCA port of shipment, as indicated in the List of Requirements and Price Schedule;

b) The amount of freight and insurance

c) the price of goods quoted CIP (name port of destination) in India as indicated in the List of Requirements, Price Schedule and Consignee List;

d) Deleted

e) the charges for Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery. Other local costs and Incidental costs, as specified in the List of Requirements and Price Schedule;

f) the charges for Incidental Services, as in the List of Requirements and Price Schedule;

g) the prices of Turnkey ( if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
h) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.5 Additional information and instruction on Duties and Taxes:

13.5.1 If the Tenderer desires to ask for excise duty, sales tax/ VAT, Service Tax, Works Contract Tax etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

13.5.2 Excise Duty:

a) If reimbursement of excise duty is intended as extra over the quoted prices, the supplier must specifically say so also indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of excise duty will be entertained after the opening of tenders.
b) If a Tenderer chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation, if any, in the excise duty during the time of supply, the tenderer must clearly mention the same and also indicate the rate and quantum of excise duty included in its price. Failure to indicate all such details in clear terms may result in rejection of that tender.
c) Subject to sub clauses 13.5.2 (a) & (b) above, any change in excise duty upward/downward as a result of any statutory variation in excise duty taking place within contract terms shall be allowed to the extent of actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall be reimbursed to the purchaser by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

13.5.3 Sales Tax:

If a tenderer asks for sales tax/ VAT, Service Tax and Works Contract Tax to be paid extra, the rate and nature of sales tax applicable should be shown separately. The sales tax / VAT, Service Tax and Works Contract Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to sales tax / VAT, Service Tax and Works Contract Tax and is payable as per the terms of the contract. If any refund of Tax is received at a later date, the Supplier must return the amount forth-with to the purchaser.

13.5.4 Octroi Duty and Local Duties & Taxes:

Normally, goods to be supplied to government departments against government contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. However, on some occasions, the local bodies (like town body, municipal body etc.) as per their regulations allow such exemptions only on production of certificate to this effect from the concerned government department. Keeping this in view, the supplier shall ensure that the stores to be supplied by the supplier against the contract placed by the purchaser are exempted from levy of any such duty or tax and, wherever necessary, obtain the exemption certificate from the purchaser. The purchaser should issue the certificate to the supplier within 21 days from the date of receipt of request from the supplier.
However, if a local body still insists upon payment of such local duties and taxes, the same should be paid by the supplier to the local body to avoid delay in supplies and possible demurrage charges and obtain a receipt for the same. The supplier should forward the receipt obtained for such payment to the purchaser to enable the purchaser reimburse the supplier and take other necessary action in the matter.

13.5.5 Customs Duty:

The Purchaser will pay the Customs duty wherever applicable.

13.6 For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 10 shall be followed.

13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.

13.8 Unless otherwise specifically indicated in this TE document, the terms FCA, FOB, FAS, CIF, CIP, DDP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris

13.9 The need for indication of all such price components by the tenderers, as required in this clause (viz., GIT clause 13) is for the purpose of comparison of the tenders by the purchaser and will no way restrict the purchaser's right to award the contract on the selected tenderer on any of the terms offered.

## 14. Indian Agent

14.1 If a foreign tenderer has engaged an agent in India in connection with its tender, the foreign tenderer, in addition to indicating Indian agent's commission, if any, in a manner described under GIT sub clause 12.2 above, shall also furnish the following information:

a) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
b) The details of the services to be rendered by the agent for the subject requirement.
c) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CMC period.
d) A copy of agreement between the Agent & their principal detailing the terms & conditions as well as services and after sales services as above to be rendered by the agent and the precise relationship between them and their mutual interest in the business as laid out in section VII (Technical specifications).
e) Principal/ manufacturer's original proforma invoice with the price bid

## 15. Firm Price

15.1 Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account.

15.2 However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIT clause 13 will apply.

## 16. Alternative Tenders

16.1 Alternative Tenders are not permitted.

16.2 However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD.

16.3 Only one tenderer is permitted to quote for the same manufacturer irrespective of models

## 17 Documents Establishing Tenderer's Eligibility and Qualifications

17.1 Pursuant to GIT clause 11, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.

17.2 The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:

a) in case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIV in this document.
b) the tenderer has the required financial, technical and production capability necessary to perform the contract and, further, it meets the qualification criteria incorporated in the Section IX in these documents.
c) in case the tenderer is not doing business in India, it is duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.

**18. Documents establishing good's Conformity to TE document.**

18.1 The tenderer shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully conform to the goods and services specified by the purchaser in the TE documents. For this purpose the tenderer shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the TE documents to establish technical responsiveness of the goods and services offered in its tender.

18.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the tenderer, the tenderer shall list out the same in a chart form without ambiguity and provide the same along with its tender.

18.3 If a tenderer furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

**19. Earnest Money Deposit (EMD)**

19.1 Pursuant to GIT clauses 8.1 and 11.1 A (i) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.

19.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).

19.3 The earnest money shall be denominated in Indian Rupees or equivalent currencies as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:

i) Account Payee Demand Draft
ii) Banker's cheque and
iii) Bank Guarantee

19.4 The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the tenderer, in favour of the "HLL Lifecare Limited" payable at New Delhi. In case of bank guarantee, the same is to be provided from any commercial bank in India or country of the tenderer as per the format specified under Section XIII in these documents.

19.5 The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender. As validity period of Tender as per Clause 20 of GIT is 120 days, the EMD shall be valid for 165 days from Techno – Commercial Tender opening date.

19.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.

19.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.

19.8 In the case of Bank Guarantee furnished from banks outside India (i.e. foreign Banks), it should be authenticated and countersigned by any nationalised bank in India by way of back-to-back counter guarantee and the same should be submitted along with the bid.

## 20. Tender Validity

20.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of 120 days (One hundred and twenty days) after the date of tender opening prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

20.2 In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by surface mail or by fax/ telex/cable followed by surface mail. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly. A tenderer, who may not agree to extend its tender validity after the expiry of the original validity period the EMD furnished by them shall not be forfeited.

20.3 In case the day up to which the tenders are to remain valid falls on/ subsequently declared a holiday or closed day for the purchaser, the tender validity shall automatically be extended up to the next working day.

## 21. Signing and Sealing of Tender

21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11.

21.2 Unless otherwise mentioned in the SIT, a tenderer shall submit three copies of its tender marking them as "Original", "Duplicate" and "Triplicate". Duplicate & Triplicate tenders may contain all pages including Technical Literature/Catalogues as per in Original tenders.

21.3 The original and other copies of the tender shall either be typed or written in indelible ink and the same shall be signed by the tenderer or by a person(s) who has been duly authorized to bind the tenderer to the contract. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the tender.

21.4 All the copies of the tender shall be duly signed at the appropriate places as indicated in the TE documents and all other pages of the tender including printed literature, if any shall be initialled by the same person(s) signing the tender. The tender shall not contain any erasure or overwriting, except as necessary to correct any error made by the tenderer and, if there is any such correction; the same shall be initialled by the person(s) signing the tender.

21.5 The tenderer is to seal the original and each copy of the tender in separate envelopes, duly marking the same as "Original", "Duplicate", "Triplicate" and so on and writing the address of the

purchaser and the tender reference number on the envelopes. The sentence "NOT TO BE OPENED" before _____ (The tenderer is to put the date & time of tender opening) are to be written on these envelopes. The inner envelopes are then to be put in a bigger outer envelope, which will also be duly sealed, marked etc. as above. If the outer envelope is not sealed and marked properly as above, the purchaser will not assume any responsibility for its misplacement, premature opening, late opening etc.

21.6 TE document seeks quotation following **two Tender System**, in two parts. First part will be known as **'Techno - Commercial Tender'**, and the second part **'Price Tender'** as specified in clause 11 of GIT. Tenderer shall seal **'Techno - Commercial Tender'** and **'Price Tender'** separately and covers will be suitably super scribed. Both these sealed covers shall be put in a bigger cover and sealed and procedure prescribed in Paras 21.1 to 21.5 followed.

## D. SUBMISSION OF TENDERS

### 22. Submission of Tenders

22.1 Unless otherwise specified, the tenderers are to deposit the tenders in the tender box kept for this purpose at **HLL Lifecare Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201 307, Uttar Pradesh**. In case of bulky tender, which cannot be put into tender box, the same shall be submitted by the tenderer by hand to **Head (P&CD)** or his nominee, **HLL Lifecare Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201 307, Uttar Pradesh**. The officer receiving the tender will give the tenderer an official receipt duly signed with date and time.

22.2 The tenderers must ensure that they deposit their tenders not later than the closing time and date specified for submission of tenders. It is the responsibility of the tenderer to ensure that their Tenders whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time. In the event of the specified date for submission of tender falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be received up to the appointed time on the next working day.

### 23. Late Tender

23.1 A tender, which is received after the specified date and time for receipt of tenders will be treated as "late" tender and will be ignored.

### 24. Alteration and Withdrawal of Tender

24.1 The tenderer, after submitting its tender, is permitted to alter / modify its tender so long as such alterations / modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders. Alterations / modifications to tenders received after the prescribed deadline will not be considered.

24.2 No tender should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a tenderer withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the tenderer in its tender.

## E. TENDER OPENING

### 25. Opening of Tenders

25.1 The purchaser will open the tenders at the specified date and time and at the specified place as indicated in the NIT.

In case the specified date of tender opening falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day.

25.2 Authorized representatives of the tenderers, who have submitted tenders on time may attend the tender opening provided they bring with them letters of authority from the corresponding tenderers.

The tender opening official(s) will prepare a list of the representatives attending the tender opening. The list will contain the representatives' names & signatures and corresponding tenderers' names and addresses.

25.3 Two - Tender system as mentioned in Para 21.6 above will be as follows. The **Techno - Commercial Tenders** are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno - Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). Thereafter, in the second stage, the Price Tenders of only the Techno - Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date notified after the evaluation of the Techno – Commercial tender. The prices, special discount if any of the goods offered etc., as deemed fit by tender opening official(s) will be read out.

## F. SCRUTINY AND EVALUATION OF TENDERS

### 26. Basic Principle

26.1 Tenders will be evaluated on the basis of the terms & conditions already incorporated in the TE document, based on which tenders have been received and the terms, conditions etc. mentioned by the tenderers in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

### 27. Scrutiny of Tenders

27.1 The Purchaser will examine the Tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed stamped and whether the Tenders are generally in order.

27.2 The Purchaser's determination of a Tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence

27.3 Deleted

27.4 The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the TE document. The tenders, which do not the meet the basic requirements, are liable to be treated as non-responsive and will be rejected.

27.5 The following are some of the important aspects, for which a tender shall be declared non-responsive during the evaluation and will be ignored;

(i) Deleted
(ii) Tender is unsigned.
(iii) Tender validity is shorter than the required period.
(iv) Required EMD (Amount, validity etc.)/ exemption documents have not been provided.
(v) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
(vi) Tenderer has not agreed to give the required performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section - V – "Special Conditions of Contract", for due performance of the contract.
(vii) Deleted

(viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
(ix) Poor/ unsatisfactory past performance.
(x) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
(xi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.
(xii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
(xiii) Tenderer has not agreed for the delivery terms and delivery schedule.

**28. Minor Infirmity/Irregularity/Non-Conformity**

28.1 If during the evaluation, the purchaser find any minor informality and/or irregularity and/or non-conformity in a tender, , the purchaser will convey its observation on such 'minor' issues to the tenderer by registered/speed post/courier/e-mail/fax etc. asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

**29 Discrepancies in Prices**

29.1 If, in the price structure quoted by a tenderer, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless the purchaser feels that the tenderer has made a mistake in placing the decimal point in the unit price, in which case the total price as quoted shall prevail over the unit price and the unit price corrected accordingly.
29.2 If there is an error in a total price, which has been worked out through addition and/or subtraction of subtotals, the subtotals shall prevail and the total corrected; and
29.3 If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail, subject to sub clause 29.1 and 29.2 above.
29.4 If, as per the judgement of the purchaser, there is any such arithmetical discrepancy in a tender, the same will be suitably conveyed to the tenderer by registered / speed post. If the tenderer does not agree to the observation of the purchaser, the tender is liable to be ignored.

**30. Discrepancy between original and copies of Tender**

30.1 In case any discrepancy is observed between the text etc. of the original copy and that in the other copies of the same tender set, the text etc. of the original copy shall prevail. Here also, the purchaser will convey its observation suitably to the tenderer by register / speed post and, if the tenderer does not accept the purchaser's observation, that tender will be liable to be ignored.

**31. Qualification Criteria**

31.1 Tenders of the tenderers, who do not meet the required Qualification Criteria prescribed in Section IX, will be treated as non - responsive and will not be considered further.

**32. Conversion of tender currencies to Indian Rupees**

32.1 In case the TE document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Price Tender' opening.

**33. Schedule-wise Evaluation**

33.1 In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender. However, as already mentioned in GIT sub clause 13.2, the tenderers have the option to quote for any one or more schedules and offer discounts for combined schedules. Such discounts wherever applicable will be taken into account to determine the lowest evaluated cost for the purchaser in deciding the successful tenderer for each schedule, subject to tenderer(s) being responsive.

**34. Comparison of Tenders**

**34.1** Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery Duty Paid (DDP) consignee site basis. The quoted turnkey prices and CMC prices will also be added for comparison/ranking purpose for evaluation. **Net Present value (NPV) of the Comprehensive Annual Maintenance charges (CMC) quoted for 5 years after the warranty period shall be added to the bid price for evaluation and will be calculated at a discounted rate of 10% per year.**

**35. Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders**

35.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender will include and take into account the following:

i) In the case of goods manufactured in India or goods of foreign origin already located in India, sales tax & other similar taxes and excise duty & other similar duties, Service Tax, Works Contract Tax etc which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and

ii) in the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.

35.2 The purchaser's evaluation of tender will also take into account the additional factors, if any, incorporated in SIT in the manner and to the extent indicated therein.

35.3 The Purchaser reserves the right to give the price preference to small-scale sectors etc. and purchase preference to central public sector undertakings as per the instruction in vogue while evaluating, comparing and ranking the responsive tenders.

**36. Tenderer's capability to perform the contract**

36.1 The purchaser, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the tenderer, whose tender has been determined as the lowest evaluated responsive tender is eligible, qualified and capable in all respects to perform the contract satisfactorily. If, there is more than one schedule in the List of Requirements, then, such determination will be made separately for each schedule.

36.2 The above-mentioned determination will, interalia, take into account the tenderer's financial, technical and production capabilities for satisfying all the requirements of the purchaser as incorporated in the TE document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its tender as well as such other allied information as deemed appropriate by the purchaser.

**37. Contacting the Purchaser**

37.1 From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.

37.2 In case a tenderer attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the tenderer shall be liable for rejection in addition to appropriate administrative actions being taken against that tenderer, as deemed fit by the purchaser.

## G. AWARD OF CONTRACT

**38. Purchaser's Right to accept any tender and to reject any or all tenders**

38.1 The purchaser reserves the right to accept in part or in full any tender or reject any or more tender(s) without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected tenderer or tenderers.

**39. Award Criteria**

39.1 Subject to GIT clause 38 above, the contract will be awarded to the lowest evaluated responsive tenderer decided by the purchaser in terms of GIT Clause 36.

**40. Variation of Quantities at the Time of Award/ Currency of Contract**

40.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded of to next whole number) without any change in the unit price and other terms & conditions quoted by the tenderer.

40.2 If the quantity has not been increased at the time of the awarding the contract, the purchaser reserves the right to increase by up to twenty five (25) per cent, the quantity of goods and services mentioned in the contract (rounded of to next whole number) without any change in the unit price and other terms & conditions mentioned in the contract, during the currency of the contract.

**41. Notification of Award**

41.1 Before expiry of the tender validity period, the purchaser will notify the successful tenderer(s) in writing, by registered / speed post or by fax/ telex/cable (to be confirmed by registered / speed post) that its tender for goods & services, which have been selected by the purchaser, has been accepted, also briefly indicating therein the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. The successful tenderer must furnish to the purchaser the required performance security within thirty days from the date of dispatch of this notification, failing which the EMD will forfeited and the award will be cancelled. Relevant details about the performance security have been provided under GCC Clause 5 under Section IV.

41.2 The Notification of Award shall constitute the conclusion of the Contract.

**42. Issue of Contract**

42.1 Promptly after notification of award, the Purchaser/Consignee will mail the contract form (as per Section XVI) duly completed and signed, in duplicate, to the successful tenderer by registered / speed post.

42.2 Within twenty one days from the date of the contract, the successful tenderer shall return the original copy of the contract, duly signed and dated, to the Purchaser/Consignee by registered / speed post.

42.3 The Purchaser/Consignee reserves the right to issue the Notification of Award consignee wise.

**43. Non-receipt of Performance Security and Contract by the Purchaser/Consignee**

43.1 Failure of the successful tenderer in providing performance security and / or returning contract copy duly signed in terms of GIT clauses 41 and 42 above shall make the tenderer liable for forfeiture of its EMD and, also, for further actions by the Purchaser/Consignee against it as per the clause 24 of GCC – Termination of default.

**44. Return of E M D**

44.1 The earnest money of the successful tenderer and the unsuccessful tenderers will be returned to them without any interest, whatsoever, in terms of GIT Clause 19.6.

**45. Publication of Tender Result**

45.1 The name and address of the successful tenderer(s) receiving the contract(s) will be mentioned in the notice board/bulletin/web site of the purchaser.

**46. Corrupt or Fraudulent Practices**

46.1 It is required by all concerned namely the Consignee/Tenderers/Suppliers etc to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Purchaser: -

(a) defines, for the purposes of this provision, the terms set forth below as follows:

(i) "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and

(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;

(b) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

(c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the purchaser if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

# SECTION - III
# SPECIAL INSTRUCTIONS TO TENDERERS
# (SIT)

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| G | 38 to 45 | Award of Contract | No Change | 25 |

# SPECIAL INSTRUCTIONS TO TENDERERS (SIT)

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/substitute/supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

**A** **Preamble**

No Change

**B** **TE documents**

No Change

**C** **Preparation of Tenders**

No Change

**D** **Submission of Tenders**

No Change

**E** **Tender Opening**

No Change

**F** **Scrutiny and Evaluation of Tenders**

No Change

**G** **Award of Contract**

No Change

# SECTION - IV

## GENERAL CONDITIONS OF CONTRACT (GCC)
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# GENERAL CONDITIONS OF CONTRACT (GCC)

**1. Application**

1.1 The General Conditions of Contract incorporated in this section shall be applicable for this purchase to the extent the same are not superseded by the Special Conditions of Contract prescribed under Section V, List of requirements under Section VI and Technical Specification under Section VII of this document.

**2. Use of contract documents and information**

2.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the purchaser in connection therewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this TE document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.

2.2 Further, the supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC sub-clause 2.1 above except for the sole purpose of performing this contract.

2.3 Except the contract issued to the supplier, each and every other document mentioned in GCC sub-clause 2.1 above shall remain the property of the purchaser and, if advised by the purchaser, all copies of all such documents shall be returned to the purchaser on completion of the supplier's performance and obligations under this contract.

**3. Patent Rights**

3.1 The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.

**4. Country of Origin**

4.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.

4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.

4.3 The country of origin may be specified in the Price Schedule

**5. Performance Security**

5.1 Within fifteen (15) days from date of the issue of notification of award by the Purchaser/Consignee, the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of minimum 30 months from the date of Notification of Award

5.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:

It shall be in any one of the forms namely Account Payee Demand Draft or Fixed Deposit Receipt drawn from any Scheduled bank in India or Bank Guarantee issued by a Scheduled bank in India,

in the prescribed form as provided in section XV of this document in favour of the Purchaser/Consignee. The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to sixty (60) days beyond Warranty Period.

5.3 In the event of any failure /default of the supplier with or without any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful to cover any failure/default of the supplier with or without any quantifiable loss to the Government.

5.4 In the event of any amendment issued to the contract, the supplier shall, within fifteen (15) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.

5.5 The supplier shall enter into Annual Comprehensive Maintenance Contract as per the 'Contract Form – B' in Section XVI with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CMC will commence from the date of expiry of the Warranty Period.

5.6 Subject to GCC sub – clause 5.3 above, the Purchaser/Consignee will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of Consignee wise bank guarantee for CMC security in favour of Head of the Hospital/ Institute/ Medical College of the consignee as per the format in Section XV.

## 6. Technical Specifications and Standards

6.1 The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' and 'Quality Control Requirements' under Sections VII and VIII of this document.

## 7. Packing and Marking

7.1 The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transhipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

7.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications and Quality Control Requirements under Sections VII and VIII and in SCC under Section V. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.

7.3 Packing instructions:

Unless otherwise mentioned in the Technical Specification and Quality Control Requirements under Sections VII and VIII and in SCC under Section V, the supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following with indelible paint of proper quality:

a. contract number and date
b. brief description of goods including quantity
c. packing list reference number
d. country of origin of goods
e. consignee's name and full address and
f. supplier's name and address

## 8. Inspection, Testing and Quality Control

8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser and/or its nominated representative(s).

8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.

8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.

8.4 In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.

8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.

8.6 The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.

8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.

8.8 Principal/ Foreign supplier shall also have the equipment inspected by recognised/ reputed agency like SGS, Lloyd, Bereau Veritas, TUV prior to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

## 9. Terms of Delivery

9.1 Goods shall be delivered by the supplier in accordance with the terms of delivery and as per the delivery period specified in the schedule of requirement. Please note that the time shall be the essence of the contract.

## 10. Transportation of Goods

10.1 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments and/or transhipment without the express/prior written consent of the purchaser. The supplier is required under the contract to deliver the goods under CIP (Named port of destination) terms; the shipment shall be made by Indian flag vessel or by vessels belonging to the conference lines in which India is a member country through India's forwarding agents/coordinators. In case the forwarding agent/coordinators are unable to provide timely adequate space in Indian flag vessel or by vessels belonging to the conference lines, the supplier shall arrange shipment through any available vessel to adhere to the delivery schedule given in the contract.
In case of airlifting of imported goods offered from abroad, the same will be done only through the National Carrier i.e. Air India wherever applicable. In case the National Carrier is not available, any other airlines available for early delivery may be arranged.

10.2 Instructions for transportation of domestic goods including goods already imported by the supplier under its own arrangement:

In case no instruction is provided in this regard in the SCC, the supplier will arrange transportation of the ordered goods as per its own procedure.

## 11. Insurance:

11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:

i) in case of supply of domestic goods on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from ware house to ware house (consignee site) on all risk basis . The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.

ii) in case of supply of the imported goods on CIP Named port of Destination Basis, the additional extended Insurance (local transportation and storage) would be borne by the Supplier from the port of entry to the consignee site for a period including 3 months beyond date of delivery for an amount equal to 110% of the overall expenditure to be incurred by the purchaser from ware house to ware house (consignee site) on all risk basis.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actuals will be reimbursed.

## 12. Spare parts

12.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:

a) The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and

b) In case the production of the spare parts is discontinued:

   i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and

   ii) Immediately following such discontinuation, providing the Purchaser/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.

12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and spares for the goods so that the same are used during warranty and CMC period.

**13. Incidental services**

13.1 Subject to the stipulation, if any, in the SCC (Section – V), List of Requirements (Section – VI) and the Technical Specification (Section – VII), the supplier shall be required to perform the following services.

i) Installation & commissioning, Supervision and Demonstration of the goods
ii) Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
iii) Training of Consignee's Doctors, Staff, operators etc. for operating and maintaining the goods
iv) Supplying required number of operation & maintenance manual for the goods

**14. Distribution of Dispatch Documents for Clearance/Receipt of Goods**

The supplier shall send all the relevant despatch documents well in time to the Purchaser/Consignee to enable the Purchaser/Consignee clear or receive (as the case may be) the goods in terms of the contract.
Unless otherwise specified in the SCC, the usual documents involved and the drill to be followed in general for this purpose are as follows.

A) For Domestic Goods, including goods already imported by the supplier under its own arrangement

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post / courier (or as instructed in the contract):

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
(iii) Two copies of packing list identifying contents of each package;
(iv) Inspection certificate issued by the nominated Inspection agency, if any.
(v) Certificate of origin;
(vi) Insurance Certificate as per GCC Clause 11.
(vii) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.

B) For goods imported from abroad

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post (or as instructed in the contract). Any delay or demurrage occurred during the customs clearance on account of the non-availability of technical support/ clarifications /documents from the supplier shall be borne by the supplier:

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Original and four copies of the negotiable clean, on-board Bill of Lading/Airway bill, marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;
(iii) Four Copies of packing list identifying contents of each package;
(iv) Insurance Certificate as per GCC Clause 11.
(v) Manufacturer's/Supplier's warranty certificate;
(vi) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd, BEAUREU VERITAS, TUV prior to despatch
(vii) Manufacturer's own factory inspection report;
(viii) Certificate of origin
(ix) Port of Loading;
(x) Port of Discharge and
(xi) Expected date of arrival.

**15. Warranty**

15.1 The supplier warrants comprehensively that the goods supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials, manufacturing or workmanship or from any act or omission of the supplier that may develop under normal use of the supplied goods under the conditions prevailing in India.

15.2 The **warranty** shall remain valid for the period as mentioned in the list of requirement/ General Technical specification, after the goods or any portion thereof as the case may be, have been delivered, installed and commissioned at the final destination.

a. No conditional warranty will be acceptable.
b. Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work and it will also cover the following wherever applicable:-
   - Any kind of motor.
   - Plastic & Glass Parts against any manufacturing defects.
   - All kind of sensors.
   - All kind of coils, probes and transducers.
   - Printers and imagers including laser and thermal printers with all parts.
   - UPS including the replacement of batteries.
   - Air-conditioners
c. Replacement and repair will be under taken for the defective goods.
d. Proper marking has to be made for all spares for identification like printing of installation and repair dates.

15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.

15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non rectification will be applicable as per tender conditions

15.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended to a further period of twenty four (24) months from the date such rectified / replaced goods starts functioning to the satisfaction of the purchaser.

15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.

15.7 During Warranty period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the installation for preventive maintenance of the goods

15.8 The Purchaser/Consignee reserve the rights to enter into Annual Comprehensive Maintenance Contract between Consignee and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.

15.9 The supplier along with its Indian Agent and the CMC provider shall ensure continued supply of the spare parts for the machines and equipments supplied by them to the purchaser for 10 years from the date of installation and handing over.

15.10 The Supplier along with its Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipments/machines/goods etc. and shall always give the most competitive price for its machines/equipments supplied to the Purchaser/Consignee.

**16. Assignment**

16.1 The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the Purchaser's prior written permission.

**17. Sub Contracts**

17.1 The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.

17.2 Sub contract shall be only for bought out items and sub-assemblies.

17.3 Sub contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").

**18. Modification of contract**

18.1 If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:

a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
b) Mode of packing,
c) Incidental services to be provided by the supplier
d) Mode of despatch,
e) Place of delivery, and

f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.

18.2 In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the supplier doesn't agree to the adjustment made by the Purchaser/Consignee, the supplier shall convey its views to the Purchaser/Consignee within twenty-one days from the date of the supplier's receipt of the Purchaser's/Consignee's amendment / modification of the contract.

**19. Prices**

19.1 Prices to be charged by the supplier for supply of goods and provision of services in terms of the contract shall not vary from the corresponding prices quoted by the supplier in its tender and incorporated in the contract except for any price adjustment authorised in the SCC.

**20. Taxes and Duties**

20.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. incurred until delivery of the contracted goods to the purchaser.

20.2 Further instruction, if any, shall be as provided in the SCC.

**21. Terms and Mode of Payment**

**21.1 Payment Terms**

Payment shall be made subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner.

**A) Payment for Domestic Goods Or Foreign Origin Located Within India.**

Payment shall be made in Indian Rupees as specified in the contract in the following manner:

**a) On delivery:**

90% payment of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents:

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
(iii) Two copies of packing list identifying contents of each package;
(iv) Inspection certificate issued by the nominated Inspection agency, if any.
(v) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
(vi) Certificate of origin.

**b) On Acceptance:**

Balance 10% payment would be made against 'Final Acceptance Certificate' as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise.

**B) Payment for Imported Goods:**

Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner:

**a) On Shipment:**

Ninety (90)% of the net CIP price (CIP price less Indian Agency commission) of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder:

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Original and four copies of the negotiable clean, on-board Bill of Lading/ Airway bill, marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;
(iii) Four Copies of packing list identifying contents of each package;
(iv) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
(v) Manufacturer's/Supplier's warranty certificate;
(vi) Inspection certificate issued by the nominated inspection agency, if applicable as per contract;
(vii) Manufacturer's own factory inspection report and
(viii) Certificate of origin by the chamber of commerce of the concerned country;
(ix) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd, BEAURU VARITUS and TUV prior to despatch.

**b) On Acceptance:**

Balance payment of 10% of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVIII to be issued by the consignees through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any.

**c) Payment of Incidental Costs till consignee site & Incidental Services** (including Installation & Commissioning, Supervision, Demonstration and Training) will be paid in Indian Rupees to the Indian Agent on proof of final installation, commission and acceptance of equipment by the consignee.

**d) Payment of Indian Agency Commission:**

Indian Agency commission will be paid to the manufacturer's agent in the local currency for an amount in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

**C) Payment of Turnkey, if any:**

Turnkey payment will be made as indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

**D) Payment for Annual Comprehensive Maintenance Contract Charges:**

The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the consignee on receipt of bank guarantee for an amount equivalent to 2.5 % of the cost of the equipment as per contract in the prescribed format given in Section XV valid till 2 months after expiry of entire CMC period.

21.2 The supplier shall not claim any interest on payments under the contract.

21.3 Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.

21.4 Irrevocable & non – transferable LC shall be opened by the respective consignees. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser/consignee, the charges thereof shall be borne by the supplier.

21.5 The payment shall be made in the currency / currencies authorised in the contract.

21.6 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.

21.7 While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract.

21.8 While claiming reimbursement of duties, taxes etc. (like sales tax, excise duty, custom duty) from the Purchaser/Consignee, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, it (the supplier) shall refund to the Purchaser/Consignee forthwith.

21.9 In case where the supplier is not in a position to submit its bill for the balance payment for want of receipted copies of Inspection Note from the consignee and the consignee has not complained about the non-receipt, shortage, or defects in the supplies made, balance amount will be paid by the paying authority without consignee's receipt certificate after three months from the date of the preceding part payment for the goods in question, subject to the following conditions:

(a) The supplier will make good any defect or deficiency that the consignee (s) may report within six months from the date of despatch of goods.
(b) Delay in supplies, if any, has been regularized.
(c) The contract price where it is subject to variation has been finalized.
(d) The supplier furnishes the following undertakings:

"I/We, _____ certify that I/We have not received back the Inspection Note duly receipted by the consignee or any communication from the purchaser or the consignee about non-receipt, shortage or defects in the goods supplied. I/We _____ agree to make good any defect or deficiency that the consignee may report within three months from the date of receipt of this balance payment.

**22. Delivery**

22.1 The supplier shall deliver the goods and perform the services under the contract within the time schedule specified by the Purchaser/Consignee in the List of Requirements and as incorporated in the contract. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed not later than the date (s) as specified in the contract.

22.2 Subject to the provision under GCC clause 26, any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:

(i) imposition of liquidated damages,
(ii) forfeiture of its performance security and
(iii) termination of the contract for default.

22.3 If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform the Purchaser/Consignee in writing about the same and its likely duration and make a request to the

Purchaser/Consignee for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser/Consignee shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

22.4 When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, interalia contain the following conditions:

(a) The Purchaser/Consignee shall recover from the supplier, under the provisions of the clause 23 of the General Conditions of Contract, liquidated damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.

(b) That no increase in price on account of any ground, whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of customs duty, excise duty, sales tax/ VAT, Service Tax and Works Contract Tax or on account of any other tax or duty which may be levied in respect of the goods and services specified in the contract, which takes place after the date of delivery stipulated in the contract shall be admissible on such of the said goods and services as are delivered and performed after the date of the delivery stipulated in the contract.

(c) But nevertheless, the Purchaser/Consignee shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, excise duty, sales tax/ VAT, Service Tax and Works Contract Tax or any other duty or tax or levy or on account of any other grounds, which takes place after the expiry of the date of delivery stipulated in the contract.

22.5 The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser/Consignee for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the purchaser.

22.6 Passing of Property:

22.6.1 The property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the conditions of the contract.

22.6.2 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.

22.6.3 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

**23. Liquidated damages**

23.1 Subject to GCC clause 26, if the supplier fails to deliver or install /commission any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods, installation, commissioning and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser/Consignee may consider termination of the contract as per GCC 24.

During the above-mentioned delayed period of supply and / or performance, the conditions incorporated under GCC sub-clause 22.4 above shall also apply.

**24. Termination for default**

24.1 The Purchaser/Consignee, without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser/Consignee pursuant to GCC sub-clauses 22.3 and 22.4.

24.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement.

24.3 Unless otherwise instructed by the Purchaser/Consignee, the supplier shall continue to perform the contract to the extent not terminated.

**25. Termination for insolvency**

25.1 If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Purchaser/Consignee.

**26. Force Majeure**

26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.

26.2 For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of , the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees , lockouts excluding by its management, and freight embargoes.

26.3 If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.

26.5 In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

**27. Termination for convenience**

27.1 The Purchaser/Consignee reserves the right to terminate the contract, in whole or in part for its (Purchaser's/Consignee 's) convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of the Purchaser/Consignee. The notice shall also indicate interalia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.

27.2 The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the supplier's receipt of the notice of termination shall be accepted by the Purchaser/Consignee following the contract terms, conditions and prices. For the remaining goods and services, the Purchaser/Consignee may decide:

a) To get any portion of the balance completed and delivered at the contract terms, conditions and prices; and / or

b) To cancel the remaining portion of the goods and services and compensate the supplier by paying an agreed amount for the cost incurred by the supplier towards the remaining portion of the goods and services.

**28. Governing language**

28.1 The contract shall be written in English language following the provision as contained in GIT clause 4. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in that language.

**29. Notices**

29.1 Notice, if any, relating to the contract given by one party to the other, shall be sent in writing or by cable or telex or facsimile and confirmed in writing. The procedure will also provide the sender of the notice, the proof of receipt of the notice by the receiver. The addresses of the parties for exchanging such notices will be the addresses as incorporated in the contract.

29.2 The effective date of a notice shall be either the date when delivered to the recipient or the effective date specifically mentioned in the notice, whichever is later.

**30. Resolution of disputes**

30.1 If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.

30.2 If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India. In the case of a dispute or difference arising between the Purchaser/Consignee and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration of an officer in the Ministry of Law and Justice, appointed to be the arbitrator by the Director General (Health Services). The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in reference exceeds Rupees One lakhs (Rs. 1,00,000/-)

30.3 Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India .

30.4 Jurisdiction of the court will be from the place where the tender enquiry document has been issued, i.e., New Delhi, India

**31. Applicable Law**

The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

**32 Withholding and Lien in respect of sums claimed**

Whenever any claim for payment arises under the contract against the supplier the purchaser shall be entitled to withhold and also have a lien to retain such sum from the security deposit or sum of money arising out of under any other contract made by the supplier with the purchaser, pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred to above ,by the purchaser, will be kept withheld or retained till the claim arising about of or under the contract is determined by the Arbitrator or by the competent court as the case may be ,and the supplier will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention.

**33. General/ Miscellaneous Clauses**

33.1 Nothing contained in this Contract shall be constructed as establishing or creating between the parties, i.e. the Supplier/its Indian Agent/CMC Provider on the one side and the Purchaser on the other side, a relationship of master and servant or principal and agent.

33.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.

33.3 The Supplier shall notify the Purchaser/Consignee /the Government of India of any material change would impact on performance of its obligations under this Contract.

33.4 Each member/constituent of the Supplier/its Indian Agent/CMC Provider, in case of consortium shall be **jointly and severally liable** to and responsible for all obligations towards the Purchaser/Consignee/Government for performance of contract/services including that of its Associates/Sub Contractors under the Contract.

33.5 The Supplier/its Indian Agent/CMC Provider shall at all times, indemnify and keep indemnified the Purchaser/Government of India against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under CMC or the Contract.

33.6 The Supplier/its Agent/CMC Provider shall, at all times, indemnify and keep indemnified the Purchaser/Consignee/Government of India against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the supplier/its associate/affiliate etc.

33.7 All claims regarding indemnity shall survive the termination or expiry of the contract.

# SECTION – V

# SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below.

These Special Conditions will modify/substitute/supplement the corresponding (GCC) clauses.
Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

**The warranty conditions will be as mentioned in the list of requirement as per section VI of the tender enquiry**

## SECTION - VI

## LIST OF REQUIREMENTS

**Part I**

| Sl No. | Equipment Name | Qty. PER AIIMS | Total Qty. | Warranty required | CMC required |
|---|---|---|---|---|---|
| 1 | CT Scan - 64 Slice | 1 | 6 | Yes (5 yrs.) | Yes |
| 2 | MRI- 1.5 Tesla<br>[Bhopal & Rishikesh - 1 each] | 1 | 2 | Yes (5 yrs.) | Yes |
| 3 | ICU Beds | 60 | 360 | Yes (2 yrs.) | Yes |
| 4 | Pulse oximeter with NIBP and Central Monitor | 20 | 120 | Yes (2 yrs.) | Yes |
| 5 | Syringe infusion pump | 90 | 540 | Yes (2 yrs.) | Yes |
| 6 | Defibrillator with ECG monitor | 12 | 72 | Yes (2 yrs.) | Yes |
| 7 | Fibroscopic Bronchoscope - Adult | 2 | 12 | Yes (2 yrs.) | Yes |
| 8 | Ventilator-portable | 10 | 60 | Yes (2 yrs.) | Yes |
| 9 | Ventilator high end ( ICU) | 20 | 120 | Yes (2 yrs.) | Yes |
| 10 | Transport monitor | 10 | 60 | Yes (2 yrs.) | Yes |
| 11 | Modular Multi Parameter monitor with central station<br>***(Medical ICU-1 Central Station +12 monitors; Surgical ICU-1 Central Station + 12 monitors)*** | 24***+2*** | 144***+12*** | Yes (2 yrs.) | Yes |
| 12 | Portable ultrasound with colour Doppler system | 4 | 24 | Yes (2 yrs.) | Yes |
| 13 | Colour Doppler echocardiography system | 2 | 12 | Yes (2 yrs.) | Yes |
| 14 | Upper GI endoscope | 2 | 12 | Yes (2 yrs.) | Yes |
| 15 | Open care system for neonates | 4 | 24 | Yes (2 yrs.) | Yes |
| 16 | Hemodialysis machine | 3 | 18 | Yes (2 yrs.) | Yes |
| 17 | Operation table with accessories | 4 | 24 | Yes (2 yrs.) | Yes |
| 18 | Surgical Diathermy with accessories | 5 | 30 | Yes (2 yrs.) | Yes |
| 19 | Laparoscopic Surgery Set | 1 | 6 | Yes (2 yrs.) | Yes |
| 20 | Anesthesia work station | 4 | 24 | Yes (2 yrs.) | Yes |
| 21 | Plasma sterilizer | 1 | 6 | Yes (2 yrs.) | Yes |
| 22 | Ultrasonic energy cleaner(high load) | 2 | 12 | Yes (2 yrs.) | Yes |
| 23 | Paediatric Cystoscope and resectoscope | 1 | 6 | Yes (2 yrs.) | Yes |
| 24 | Ultrasonic Cutting and Coagulating Device | 1 | 6 | Yes (2 yrs.) | Yes |
| 25 | Digital X-ray Unit | 1 | 6 | Yes (5 yrs.) | Yes |
| 26 | Clinical CE/IVD Flow Cytometer | 1 | 6 | Yes (2 yrs.) | Yes |

**Part II: Required Delivery Schedule:**

**a) For Indigenous goods or for imported goods if supplied from India:**

60 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site (Tenderers may quote earliest delivery period).

Installation and commissioning shall be done within two weeks of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later.

**b) For Imported goods directly from foreign:**

60 days from the date of opening of L/C. The date of delivery will be the date of Bill of Lading/Airway bill. (Tenderers may quote the earliest delivery period). Except in case of CT, MRI and Digital X-ray (1000 mA) the delivery period will be 90 days from date of opening of LC.

Installation and commissioning shall be done within two weeks of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later. Except in case of CT, MRI and Digital X-ray (1000m A) the Installation and commissioning shall be done within 45 days of receipt of the stores/ goods at site or within 45 days of handing over the site for installation, whichever is later

For delayed delivery and/ or installation and commissioning liquidated damages will get applied as per GCC clause 23.

**Note: Deleted**

**Part III: Scope of Incidental Services:**

Installation & Commissioning, Supervision, Demonstration, Trial run and Training etc. as specified in GCC Clause 13

**Part IV:**

Turnkey (if any) as per details in Technical Specification.

**Part V:**

Warranty period as per details in general technical specification and as specified in Part I above. Warranty period will be 24 months from the date of installation, commissioning and acceptance or 30 months from the date of last shipment/dispatch, whichever is earlier except in case of CT, MRI and Digital X-ray (1000 mA) wherein the warranty period will be 60 months from the date of installation, commissioning and acceptance or 66 months from the date of last shipment/ despatch whichever is earlier.

Comprehensive Maintenance Contract (CMC) as per details in Technical Specification as specified in part I above

**Part VI:**

**Required Terms of Delivery and Destination.**

**a) For Indigenous goods or for imported goods if supplied from India:**

At Consignee Site(s)

**b) For Imported goods directly from abroad:**

The foreign tenderers are required to quote their rates on CIP Named Port of Destination Basis giving breakup of the price as per the Proforma prescribed in the Price Schedule. Purchaser will place the order on CIP Named Port of Destination basis.

The shipping arrangements shall be made in accordance with the instruction of Ministry of Shipping & Transport, New Delhi, India as detailed in Annexure 1 at Section XIX.

**Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery**.

**Destination/Consignee details are given in Section XXI**

# Section – VII
# Technical Specifications

**Note 1:** Tenderer's attention is drawn to GIT clause 18 and GIT sub-clause 11.1 A (iii). The tenderer is to provide the required details, information, confirmations, etc. accordingly failing which it's tender is liable to be ignored.

**Note 2:** General: Bidders are requested to make sure that they should attach the list of equipments for carrying out routine and preventive maintenance wherever asked for and should make sure that Electrical Safety Analyzer / Tester for Medical equipments to periodically check the electrical safety aspects as per BIS Safety Standards IS-13540 which is also equivalent to IEC electrical safety standard IEC-60601 is a part of the equipments. If the Electrical Safety Analyzer/Tester is not available they should provide a commitment to get the equipments checked for electrical safety compliance with Electronic Regional Test Labs / Electronics Test and Development Centres across the country on every preventive maintenance call.

**Note 3:** OPTIONAL ITEMS: **Deleted**.

# TECHNICAL SPECIFICATIONS

## Item No. 1
## CT SCAN – 64 Slice

The system should be latest state of the art, independent 64 or more rows of detectors with acquisition of at least 64 slices per rotation capable of integrating with any PACS/HIS system. The system should be DICOM - ready with true isotropic volume acquisition and sub millimeter resolution. The model quoted should be, AERB Type approved and US FDA / European CE certified. The essential requirements of the system are as follows:-

**a) Gantry:**

- Aperture: 70 cms or more
- FOV: 50 cms or more
- 3-D laser lights for positioning.

**b) X-Ray Generator:**

- High Frequency type.
- Power output: 80 kW or higher
- mA Range: 20-600 mA (With incremental steps of 10 mA)
- KV Range: 80-110 or more

**c) X-Ray Tube:**

- Tube Voltage: 80-110 kV or more
- Anode Heat Storage Capacity of at least 6.3 MHU or direct cooling tube

**d) Patient Table:**

- Load carrying capacity at least of 180 Kg with positional accuracy of 1 mm or less
- Metal free scan-able range of 150 cm or more
- Floating table top with foot pedal/hand control for positioning.

**e) Spiral Acquisition:**

- Scan Time should be 0.4 sec or less for full 360 degree rotation.

- Minimum slice thickness should be 0.625 mm or less.
- Pitch Factor (volume pitch): freely selectable in auto mode and also manually variable between 0.5 to 1.5 or more. Specify all possible pitch selections.
- Bolus Triggered or bolus chase spiral acquisition should be available.
- Real time x-ray dose reduction which combines both Z axis and angular tube current modulation to adjust the dose to the size and shape of individual.

**f) Image Resolution:**

1. High contrast resolution should be at least 15 lp/cm for axial and spiral scan at 0% MTF with full FOV.

2. Low contrast resolution – 5mm or less at 3.0 HU using 20 cm CATPHAN phantom on 10 mm slice thickness.

**g) Data Acquisition System:**

- Detector- Capable of acquiring 64 slices per 360 degree of rotation.
- At least 64) rows of independent detectors are required with Z-axis coverage of 38 mm or more.
- Solid state or rare earth detectors of latest technology free from repeated calibration.

**h) Image Reconstruction:**

- High speed real time reconstruction with display matrix of 1024x1024 or more.
- Reconstructed slice thickness should be sub-millimeter to 10mm freely selectable.

**i) Operator Console:**

- High resolution medical grade LCD color monitors of 19" or more.
- Should perform Registration, scheduling, protocol selection, Volume rendering, volume measurements, Multi-planar Reconstruction, and standard evaluation application and all available post processing functions without the help of the satellite workstation.
- Raw Data storage with at least 500 GB Hard disc having image storing capacity of 5,00,000 or more in 512x512 format.

- Auto-voice capability with custom designed key board and mouse.
- Archiving options: CD-R, DVD, should be available. 5000 rewritable DVDs should be provided.

**j) Workstation client server architechure)**

1. It should be a high speed (minimum post-processing frame rate of 16 frames/sec) CPU with a speed of 3.0 GHz or better and with an independent Hard disc storage capacity of 512 GB or more, with 19 inches or more high resolution medical grade colour LCD monitors capable of simultaneously viewing and performing all post processing functions and filming independently without the help of main console.
2. Memory of the workstation should be independent of the console.
3. Two way data transfer between the operator console & the satellite workstation should be automatic and standard.
4. Post Processing Soft-wares

   (i) Perfusion CT for brain

   (ii) CT Angio, VRT, MIP, MPR, 3-D Shaded Surface display, Image Fusion, Vessel segmentation, luminal view

   (iii) Virtual Endoscopy with facility for virtual dissection and computer aided detection of polyps.

   (iv) Advanced cardiac package including Coronary Artery Imaging, Calcium Scoring, Myocardial Viability software, Cardiac functional analysis and advanced Vessel Analysis including stenosis assessment. Facility for prospective and retrospective ECG gating, facility for automatic selection of rotation speed according to heart beat and step and shoot for low dose acquisition should be available.

   (v) Automatic bone Removal facility.

   (vi) Dental CT.

   (vii) Lung nodule evaluation software. CAD for Lung nodule evaluation software should be quoted as optional.

(viii) Liver segmentation display software in different colours, volumetry and virtual surgical plane identification

ix) Bone Mineral Densitometry software.

5. Interactive & Automatic Cine display should be available.

6. Image Evaluation Tools:

   (i) Parallel evaluation of multiple ROI in circle, irregular and Polygonal forms,

   (ii) Statistical Evaluation for area/ volume, S.D, Mean/Max and Histograms.

   (iii) Distance & angle measurement, freely selectable, positioning of co-ordinate system, grid and image annotation.

7. One similar independent post processing stations (workstations, total no.2) with all the software as in the main console should be available. . The necessary connectivity etc. for proper functioning should be provided by the vendor with the supply of stand alone server of atleast 10 tera byte storage capacity with expansion slot of additional tera bytes. All post processing facility and data archiving should be available independently at both the workstations.

**k) Patient communication system:**

1. An integrated intercom and Automated Patient Instruction System (API) should be provided.

2. Two closed circuit TV for patient monitoring.

**l) Dry Chemistry Laser Imager:**

1. Resolution: 16 bits/ 500 dpi or more with minimum three ports.

2. Support Multiple Film Sizes: one of which must be 17”x14”.

3. DICOM 3.0 Compatible.

**m) System Configuration Accessories, spares and consumables:**

- Collapsible wheel chair with rubberized swivel wheels - 01 nos.
- Standard Patient positioning accessories and restraining devices - 02 sets.

- Light weight "ZERO LEAD" Radiation protection apparels including Aprons - 5 Nos. Gonadal shields – 5 Nos, Thyroid shields – 5 Nos and Lead goggles – 5 Nos.
- Lead Glass 100 cm x 150 cm of 2 mm Lead equivalence as per the requirement of the equipment. As per AERB recommendations
- Online UPS of suitable rating should be supplied for the complete system including Gantry, computer system, with at least 30 minutes back up.
- Dual Head Pressure Injector with 5000 syringes of 200 ml.
- Software for Remote Diagnostics Service should be provided.
- System must be PACS, HIS/RIS interface ready without any new hardware or software.
- Centralized oxygen and suction facility (to be connected to the nearest port) in gantry and recovery room.
- A free comprehensive software upgrade guarantee for entire life of scanner must be provided.
- Warranty: 60 months from the date of satisfactory installation. The warranty shall cover all the accessories, turnkey work including CT tube and all consumables.
- Comprehensive Maintenance Contract for next five years including all the accessories, turnkey work, Air conditioning and CT tube and all consumables.

- **Real time CT Fluoroscopy** with at least 6 to 8 frames per second with dedicated 21" color LCD monitor. Facility table side controls and foot switch for biopsy to be quoted separately. (optional)

**n) Instructions to the vendors/suppliers:** All companies must give product data sheets confirming the specifications along with the tender. ***The compliance statement must be filled strictly under the heading given in the tender***. Each specification corroborated in the compliance statement must give the page number where it is listed in the product data sheet. Incompletely filled information will not be considered.

Vendors are requested to see the site for installation of the CT.

o) AERB site approval: Vendors shall be responsible for getting AERB Site Plan approval prior to installation.

# Turnkey

**To be provided by the consignee**

1. Bare Walls
2. Power Supply - Till the room to be provided. However rates per meter of cabling and other accessories needs to be quoted as optional item in case this job is assigned to the bidder
3. Payment to be made as per actual on pro-rata basis.
4. The optional items will not be counted for ranking.

**Turn Key to be provided by the Bidder:**

**1.** Rate per sq.ft for lead lining to be paid in the event of the wall thickness does not meet the AERB requirements **(For ranking purpose 1500Sq ft will be considered).**
2. Flooring
3. False ceiling
4. AIR- CONDITIONING - Supplier has to provide suitable Air Conditioning units to maintain the required temperature in the Gantry room, equipment room, console room & other areas covering the turnkey work.
5. Vitreous Tiles on the walls however in case the lead linings are provided, the cost may be adjusted accordingly
6. All trenches and railings wherever required
7. Any other necessary work required for satisfactory working of the equipment.

# Schedule of Finishes-

1. Total covered area should be approximate 1500 Sq.Feet or as per actual drawing attached.
2. The thickness of the walls should be according to AERB/BARC norms.
**3.** Should provide lead lining were ever required. (Doors, Etc.) as per AERB/BARC norms.

**Schedule of Finishes: Turnkey Project for Multi slice CT Scan**
**Quote price per square feet**

| S.No. | Room | Flooring | Skirting/Dado | Walls | Ceiling |
|---|---|---|---|---|---|
| 1. | Reception, Waiting, Patient Preparation | 300x300x8.5 mm thick mirror stone tiles. | 100mm high tile skirting to match floor. | Cement plaster & Emulsion paint | Perforated Al. Panel False Ceiling with acoustic lining & Al. suspension |
| 2. | Examination Room | 300x300x2.0 mm thick vinyl tiles | 100mm high hard wood skirting | Prelaminated particle board wall paneling | -Do- |
| 3. | Control, Computer, Gantry Room & | 300x300x8.5 mm thick granite | 100 mm high granite tiles skirting | Cement plaster and plastic emulsion | -Do- |

| | | | | | |
|---|---|---|---|---|---|
| | Corridor | | | paint | |
| 4. | Electrical room | 52mm thick cement concrete flooring with hardener | 100 mm high cement plaster skirting | Cement plaster and dry distemper paint | Plaster and dry distemper |
| 5. | Toilet and pantry | 300x300x8.5 mm thick ceramic tiles (polished on counter top) | 100x200x5 mm thick glazed tiles upto door height from floor level. | Plaster & oil bound distemper on walls above false ceiling | Gypsum board false ceiling with oil bound distemper paint |

# AIR- CONDITIONING

1. The capacity of the a/c should be sufficient to maintain the require temperature.
2. It is the responsibility of the bidder to provide all the electrical accessories.

**Schedule of furniture:**

Following furniture should be provided by the bidder:

| AREA | DESCRIPTION | QTY. |
|---|---|---|
| Waiting & Reception | : Reception desk in block board construction with granite top | 1 No. |
| | : Storage cupboard | 1 No. |
| | : Reception chair | 1 Nos. |
| | : PVC molded chairs on common steel stand in group | 12 Seats |
| | : Corner Table | 4 Nos. |
| Control Room | : Low backed swing chairs on castors with armests | 3 Nos. |
| | : Film Viewer (6 films) | 1 No. |
| Gantry Room | : Drug trolley on castors | 1 No. |
| | : Lead Aprons (Light weight) | 4 Nos. |
| Patient preparation | : Patients couch | 1 No. |
| | : Drug trolley | 1 No. |
| | : Examination Stool | 1 No |

All the furniture should be reputed make.

**It is the responsibility of the bidders to visit the consignee site for assessing site requirements and readiness.**

# Item No. 2

## MRI- 1.5 Tesla

Competitive bids are invited for installation of **1.5 Tesla** MRI System with state-of-the-art latest features commercially available at the time of supply **European CE/ US FDA approved).** The system should be cost effective, with user friendly platform, reliable and capable of providing excellent performance for clinical imaging and research. The detailed specification that follows shall be understood to be minimum requirement.

**1. MAGNET**

a. Whole Body **1.5Tesla** Magnetic Resonance Imaging System optimized for higher performance in Whole Body and Vascular examinations with superconducting magnet, high performance gradients and digital Radio Frequency System.
b. **1.5T** active shielded super conductive magnet should be short and non-claustrophobic.
c. It should have at least 70 cm patient bore with flared opening.
d. Magnet length should be less than 200cm.
e. Homogeneity of magnet should be less than 3.5 ppm over 45cm DSV
f. The magnet should be well ventilated and illuminated with built in 2 way intercom for communication with patient.
g. It should have a built in cryo-cooler such that helium consumption does not exceed 0.05 lit/ hour.

**2. SHIM SYSTEM**

a. High performance, highly stable shim system with global and localized automated shimming for high homogeneity magnetic field for imaging and spectroscopy.
b. Auto shim should be available to shim the magnet with patient in position

**3. GRADIENT SYSTEM**

a. Actively shielded Gradient system

b. The gradient should be actively shielded with each axis having independently a slew rate of at least 200 T/m/s and a peak amplitude of 44mT/m.

c. The system should have efficient and adequate Eddy current compensation

d. Effective cooling system for gradient coil and power supply

**4. RF SYSTEM**

a. A fully digital RF system capable of transmitting power of at least 15kw.

b. It should also have at least 32 independent RF receiver channels with each having bandwidth of 1 MHz or more along with necessary hardware to support quadrature ICP array/Matrix coils. The highest receiver channels available with the vendor should be quoted.

c. It should support Parallel acquisition techniques with a factor of up to 2 in 2D.

d. Should allow remote selection of coils and / or coil elements.

**5. PATIENT TABLE**

a. The table should be fully motorized, computer controlled table movements in vertical and horizontal directions.

b. A CCTV system with colour LCD display to observe the patient should be provided: Moving table angiography should be possible.

c. There should be a hand held alarm for patients

**6. COMPUTER SYSTEM /IMAGE PROCESSOR / OPERATOR CONSOLE**

a. The main Host computer should have a 19 inches or more high resolution LCD TFT color monitor with 1024 x 1024 matrix display

b. The system should have image storage capacity of 100 GB for at least 2,00,000 images in 256x256 matrix.

c. The reconstruction speed should be at least 1300 or more for full FOV 256 matrix.

d. The main console should have facility for music system for patient in the magnet room. The system should have DVD / CD / flash drive archiving facility. Supply 5000 DVD along with the system. The system should be provided with auto DVD writer.

e. Two way intercom system for patient communication.

f. MRI System should be enabled and networked to RIS/HIS

**7. MEASUREMENT SYSTEM**

a. Largest Field of View should be at least 45 cm in all three axis.

b. The measurement matrix should be from 128x128 to 1024x1024.

c. Minimum 2D slice thickness mm should be equal to or less than 0.5

d. Minimum 3D slice thickness mm should be equal to or less than 0.1

**8. COIL SYSTEM**

a. The main body coil integrated to the magnet must be Quadrature / CP. In addition to this following coils should be quoted (total **11** including body coil)

b. Multichannel Head coils with at least 8 channel for high resolution brain imaging.

(16 channel coil should be supplier whenever available to the vendor with no additional cost.)

c. Neuro-vascular Coil with 16 or more channels or Head / Neck Coil combined, capable of high resolution neuro-vascular imaging

d. Spine Array/Matrix Coils for thoracic and lumbar spine imaging.

e. Body Array/Matrix coil with at least 38 cm z axis coverage for imaging of abdomen, angiograms and heart. (The best available body coil with the vendor must be supplied)

f. Dedicated Cardiac Coil **(optional – Price to be quoted separately).**

g. Suitable coil for peripheral angiography application

h. Bilateral Breast Coil with at least 4 channel **The best available coil with vendor should be supplied.**

i. Dedicated Shoulder Coil

j. Dedicated Knee Coil

k. General purpose flexible coils and circular coils

l. Loop Flex Coil

n. Coil Storage Cart

o. The system should continuously monitor the RF coils used during scanning to detect failure modes. RF coils should not require either set up time or coil tuning; Multi coil connection for up to 2 or more coils multaneous scanning without patient repositioning i.e. like 4GTIM/ GEM/D stream coil combination should be quoted as standard.

**9. APPLICATION SEQUENCES**

a. The system should have basic sequences package with Spin Echo, InversionRecovery, Turbo Spin Echo with high turbo factor of 256 or more, Gradient Echo with ETL of 255 or more, FLAIR.

b. Single slice, multiple single slice, multiple slice, multiple stacks, radial stacks and 3D acquisitions for all applications.

c. Single and Multi shot EPI imaging techniques with ETL factor of 255 or more

d. Fat suppression for high quality images both STIR and SPIR.

e. The system should acquire motion artifact free images in T2 studies of brain in restless patients (Propeller, Multivane, Blade etc)

f. Dynamic study for pre and post contrast scans and time intensity studies

g. MR angio Imaging: Should have 20/30 TOF, 20/30 PC , MTS and TONE, ceMRA, Facilities for Accelerated time resolved vascular imaging with applications like Treats/Tracks/Tricks sequences.

h. Fat and water excitation package. Diffusion Weighted Imaging, with at least b value of 5000 or more.

i. Bolus chasing with automatic and manual triggering from fluro mode to 3D acquisition mode with moving table facility.

j. Non contrast enhanced peripheral angiography for arterial flow with Native/Trance/lnhance sequences

k. Whole body screening imaging studies for metastasis

I. High resolution Abdominal and Liver imaging in breathold and free breathing modes with respirator triggered volume acquisitions

m. The system should have basic and advanced MRCP packages including free breathing and 3D techniques.

n. The system should have facility for flow quantification of CSF, vessel flow and hepatobiliary system.

p. The system should have the Hydrogen, Single Voxel spectroscopy, Multivoxel,Multislice & Multiangle 2D, 3D Spectroscopy and Chemical shift imaging in 2D/3D. The complete processing/post-processing software including color metabolite maps

should be available on main console. Complete prostate spectroscopy hardware and applications should be provided.

q. Advanced Cardiac Applications: **(Optional - price to be quoted separately).**

VCG gating, Morphology/wall motion; Cine perfusion imaging; Myocardial viability imaging; Arrhythmia rejection techniques, Advanced Cardiac Ventricular Measurement Analysis; Cine Cardiac Tagging Techniques; Coronary artery techniques; real time interactive imaging, 20/30 fast field echo/balanced/steady state techniques and **evaluation package on workstation**

r. Advanced Breast imaging Package.

s. Perfusion imaging of brain (including ASL)

t. Susceptibility weighted imaging (i.e.SWI)/ Venous BOLD imaging.

u**.** Multi Direction DWl and DTI with minimum of 32 directions(Complete package including quantification and tractography software). Prospective motion correction enabled software preferred.

v. High resolution imaging for inner ear

**10. WORK STATION**

a. A workstation with preferably the same user interface as of main console is required with the availability of all necessary software including.

i. Basic post-processing software including MIP, MPR, surface reconstruction and volume rendering technique.

ii. **Advanced post-processing offered applications perfusion quantification, advanced diffusion and DTI, processing of 20/30 CSI data, with color metabolite mapping, quantification of CSF flow data, vascular analysis package.**

b. It should have at least 19 inch LCD TFT color monitor, with hard disk of at least 120 GB for at least 250,000 image storage in 256 matrix, and 4 GB RAM capacity or more, with self-playing OVO/CO archiving facility.

c. The workstation should display cardiac cine images in movie mode with rapid avi creation

d. The workstation should enable printing in laser film camera and color printers

**11. SAFETY FEATURES**

The System should have following safety features

a. The magnet system should include an Emergency Ramp Down unit (ERDU) for fast reduction of the magnetic field with Ramp Down time below 3 minutes

b. The magnet should have .quench bands that contain the fringe fields to a specified value in the event of a magnet quench

c. Real time SAR calculation should be performed by software to ensure that RF power levels comply with regulatory guidelines and are displayed on each image

d. The system shall have manual override of the motor drive for quick removal of the patients from the magnet bore

e. Temperature sensor (built in) for magnet refrigeration efficiency must be provided.

**12. DOCUMENTATION**

a. DICOM compatible Dry Chemistry laser camera with integrated processor for filming from main console & workstation.

b. Printing on films of 14" x 17",11" x 14" and 10" x 8" sizes in a resolution of 500 or more dpi. It should be possible to connect other imaging modalities to the printer**.** 5000 compatible films to be provided.

**13. UPS**

a. The system should be provided with UPS system for the complete system with at least 30 minute back up.

**14. SUITABLE RF ENCLOSURE**

a. RF Cabin: The system should be supplied with the imported RF cabin with RF room shielding, RF Door screen, and interiors for the same should be carried out suitably.

**15. ACCESSORIES**

a. Dual Head MRI Compatible Pressure Injector with 100 sets of syringes.

b. Water Chiller for Cold Head I Gradients..

c. one Non-ferromagnetic patient transfer trolley of international make should be provided.

e. Fire Fighting System, Detectors and 6 Fire Extinguishers.

f. Hand held metal detectors and two mental detector doors to be installed at the entrance point as will be intimated.

g. Closed circuit CCD camera

h. Phantoms for image quality audits.

i. MRI compatible Anaesthesia machine – detailed specification given below.

j. Suction and O2 pipeline and manifold to be provided inside the RF enclosure.

**16. GUARANTEE**

a. The vendor should guarantee the service and spare support for 10 Years of the system including Helium and cold head and all accessories after 5 years of warranty.

b. Application training to be provided onsite for total of FOUR weeks.

c. Two Radiologists to be provided training at premier govt. teaching institute within country for two weeks.

**17. Warranty and CMC:**

| | |
|---|---|
| 1. | The system should have warranty for five years including helium refill, all accessories and turnkey work. |
| 2. | Comprehensive Maintenance Contract (CMC) for the whole equipment including helium refill and all accessories including turnkey for five years should be quoted after warranty. |

**All tender responses should include the following without which the tender will be considered invalid**.

| | |
|---|---|
| 1 | The model with 'the best and latest technical features' available with the vendor should be quoted in tender response with original printed vendor data sheets. |
| 2 | All product catalogues in original. |

| | |
|---|---|
| 3 | A soft copy in word format in addition to a hard copy to be provided in a CD. |
| 4 | When the vendor data sheet disagrees with the bid response, clarification should accompany in the form of letter/certificates from the principals in original. |
| 5 | The System should be DICOM – 3MPPS & should be ready to integrate with any existing PACS/HIS System. |
| 6 | List of all installations of the system in the country. |
| 7 | The compliance statement must be filled strictly under headings given in the tender. Each specification corroborated in the compliance statement must give the page number where it is listed in the original technical data sheet along with soft copy. |
| 8 | Turnkey work detail to be provided. |

## Technical Specifications for MRI Compatible Anesthesia Machine

1. All the components of anesthesia machine including anesthesia ventilator, anesthesia monitor and accessories should be MRI compatible

2. The Machine should have separate indexed (pin index/ DISS/NIST) provision for connecting central pipeline gas supply of oxygen, air and nitrous oxide. It should have mounting capability of two oxygen and two nitrous oxide pin-indexed gas cylinders.

3. High pressure tubing for Oxygen, air and Nitrous Oxide for central supply connection with pipeline connectors should be supplied with machine.

4. There should be pressure indicating gauges for each gas for both cylinder as well as pipeline supply in accordance to ISO requirements.

**5. Gas Flow Management:**

**a.** Mechanical colour and touch coded flow meters: precisely calibrated cascaded tube flow meters for oxygen down the stream.

**b.** Mechanical hypoxic guard to ensure minimum concentration of 25% oxygen, across all oxygen nitrous oxide mixtures and oxygen failure alarm along with nitrous oxide cut off conforming to ISO requirements.

**c.** Machine should be able to deliver maximal flows for oxygen and nitrous oxide at least up to 8 liters per minute through flow meters.

**d.** Emergency oxygen flush that can deliver flows between 35 to 50 liters per minute. It should be protected from accidental activation as per ISO requirements.

**6. Vaporisers:**

**a.** Vaporiser shall mount to a selectatee manifold of at least two vaporizers, which allows easy exchange between agents.

**b.** Vaporizer must be isolated from the gas flow in the off position and prevent the simultaneous activation of more than one vaporizer.

**c.** With each working station temperature, pressure and flow compensated anaesthetic agent specific vaporizers for Isoflurance and sevoflurane should be provided. Vaporizers should be quick loading / unloading type.

**7. Breathing system:**

**a.** Closed circle system with carbon dioxide absorbent canisters should be part of machine. There should be common gas outlet for using other type of breathing system with this machine. Breathing system shall be fully autoclavable to 134ºC and natural latex free. Long coaxial breathing system tubings to meet the requirement of MRI suit.

**b.** Facility of connecting to scavenging system.

8. Anesthesia machine should be mounted on flour large antistatic castor wheels with foot brake/ locking facility for at least front two wheels.

9. There should be work surface and drawers with at least one drawer with locking facility.

II **Specifications for Anesthesia Ventilator:**

1. The anesthesia machine should have integrated Anesthesia Ventilator system that should have at least CMV or A/CMV mode with adjustable breath rate, tidal volume and I:E ratio.

2. Ventilator bellows should be integrally mounted to the breathing system and ascending type. Bellow assembly should be autoclavable.

3. Anesthesia ventilator should have following adjustable parameters: (The range mentioned below in adjustable parameters is minimal desirable and wider range than this will be preferred)

**a.** Tidal volume range 50ml to 1200ml

**b.** Respiratory rate range 4 to 30 breath per minute

**c.** I:E ratio range 1:1 to 1:3

**d.** Inspired airway pressure range 15 to 60cm of water.

4. Anesthesia ventilator should have audiovisual alarms with temporary muting facility for power failure, breathing system disconnection, high inspiratory airway pressure

III. **Specifications for Anesthesia Monitor:**

1. The anesthesia machine should have integrated / mounted monitoring system with memory to monitor patient parameters:

2. Five lead ECG with arrhythmia detection facility.

3. Respiratory rate measurement by impendence method.
4. SPO2 measurement with plethysmograph and saturation dependent audio tone.
5. NIBP measurement.
6. Temperature measurement.
7. It should have provision for automatic identification and measurement of anesthetic agents (Sevoflurance, isoflurane ) and EtCO2

IV. **Essential Accessories**

Each anesthesia machine should be supplied with complete MRI compatible accessories and spares to make its all functions operational.

1. Long coaxial circle system tubings 1 set to suit MRI suit, 2L reservoir bag 1, brains breathing system
2. At least three ECG cables with MRI compatible body electrodes
3. SPO2 cable and sensor adult 1 paediatric 1
4. Temperature probe nasopharyngeal 1, skin 1
5. EtCO2 and anesthesia gas sampling lines 2
6. NIBP tubing and cuff adult range 1, medium 1, paediatric 1

V. **Others**

1. Anesthesia ventilator should be gas driven. In case electric driven, it should have at least 30 minutes battery backup in case of mains electricity failure. Monitor should also have at least 30 min battery backup.

VI. Laryngoscope – adult and pediatric compatible with MRI both 1.5 & 3 T (2Nos.)

## Turnkey

Total covered area should be approximate 1500 Sq.Feet or as per actual drawing attached **(For ranking purpose 1500 Sq-ft will be considered).**

**To be provided by the consignee**

1. Bare Walls
2. Power Supply - Till the room to be provided. However rates per meter of cabling and other accessories needs to be quoted as optional item in case this job is assigned to the bidder
3. Payment to be made as per actual on pro-rata basis.
4. The optional items will not be counted for ranking.

**To be provided by the Bidder**

1. RF shielding
2. False ceiling

3. Flooring
4. AIR- CONDITIONING - Supplier has to provide suitable Air Conditioning units to maintain the required temperature in the Gantry room, equipment room, console room & other areas covering the turnkey work.
5. Base reinforcement
6. Any trenching and railing
7. Any other necessary work required for the satisfactory working of the equipment.

# SCHEDULE OF FINISH: MRI SCAN

| S.No. | Room | Flooring | Skirting/Dado | Walls | Ceiling |
|---|---|---|---|---|---|
| 1. | Reception, Waiting, Patient Preparation | 300x300x8.5 mm thick mirror stone tiles. | 100mm high tile skirting to match floor. | Cement plaster & Emulsion paint | Perforated Al. Panel or as required False Ceiling with acoustic lining & Al or as required . suspension |
| 2. | Examination Room | 300x300x2.0 mm thick vinyl tiles | 100mm high hard wood skirting | Prelaminated particle board wall paneling | -Do- |
| 3. | Control, Computer, Gantry Room & Corridor | 300x300x8.5 mm thick granite | 100 mm high granite tiles skirting | Cement plaster and plastic emulsion paint | -Do- |
| 4. | Electrical room | 52mm thick cement concrete flooring with hardener | 100 mm high cement plaster skirting | Cement plaster and dry distemper paint | Plaster and dry distemper |
| 5. | Toilet and pantry | 300x300x8.5 mm thick ceramic tiles (polished on counter top) | 100x200x5 mm thick glazed tiles upto door height from floor level. | Plaster & oil bound distemper on walls above false ceiling | Gypsum board false ceiling with oil bound distemper paint |

# AIR- CONDITIONING

1. The capacity of the a/c should be sufficient to maintain the require temperature.
2. It is the responsibility of the bidder to provide all the electrical accessories.

**Schedule of furniture:**

Following furniture should be provided:

**AREA** **DESCRIPTION** **QTY.**

Waiting & Reception : Reception desk in block board

| | | | |
|---|---|---|---|
| | | construction with granite top | 1 No. |
| | : | Storage cupboard | 1 No. |
| | : | Reception chair | 1 Nos. |
| | : | PVC molded chairs on common steel stand in group | 12 Seats |
| | : | Corner Table | 4 Nos. |
| Control Room | : | Low backed swing chairs on castors with armests | 3 Nos. |
| | : | Film Viewer (6 films) | 1 No. |
| Gantry Room | : | Drug trolley on castors | 1 No. |
| | : | Lead Aprons (Light weight) | 4 Nos. |
| Patient preparation | : | Patients couch | 1 No. |
| | : | Drug trolley | 1 No. |
| | : | Examination Stool | 1 No. |

All the furniture should be reputed make.

**It is the responsibility of the bidders to visit the consignee site for assessing site requirements and readiness.**

## Item No. 3

# I.C.U Beds

**1. Description of Function**

**1.1** ICU Beds are required in the Intensive Care for comfort &safety of the patient and to facilitate comfortable transfer to and fro emergency/OT/Wards etc. It is also required to carry out point of care procedures including radiological procedures at the bedside.

**2. Operational Requirements**

**2.1** The system should be electrically operatable and adjustable for heights, trendelenburg etc. It should also be having radiotransluscent top for carrying out X-Ray at the bedside.

**2.2** Demonstration of the system is a must

**3. Technical Specifications**

**3.1** Should have four section mattress base

**3.2** Should have X-Ray translucent back section made up of high pressure laminate.

**3.3** Should have X-Ray cassette holder underneath the back section & should allow insertion of X-Ray cassette from either side of the bed.

**3.4** Base frame & support frame should be made up of Stainless steel for long life & prevention from rusting .

**3.5** Should have stepless electrical adjustment for the following :-

a. Height: 450-840 mm

b. Back section: 0- 50 degrees

c. Leg Section: 0-30 degrees

**3.6** Should have step-less pneumatic adjustment for Trendlenburg (25°C approx.), anti-trendlenburg (15°C approx.)

**3.7** Should have a manual quick release mechanism for back section adjustment during emergency situation

**3.8** Should be equipped with four articulated half-length tuck away side rails

**3.9** Should be equipped with large castors (diameter 150 mm) with central braking and steering facility.
**3.10**Mattress of the Bed should be made up of high density foam with Anti-Microbial agent incorporated into all components that assists in Prohibiting growth of bacteria & fungi and easy to clean.
**3.11** Mattress should be fully Radiolucent for ease in performing portable X-Rays.
**3.12** Should have bumpers at all four corners and place for fixing accessories
**3.13** Dimensions of bed:
Length: 2200 -2290 mm
Width: 850 -1020mm
Mattress Size: appropriate as per bed size

**4. System Configuration Accessories, spares and consumables**
**4.1** I.C.U Bed Mainframe perforated heavy gauge sheet
**4.2** Heavy Gauge & total weight of Bed
**4.3** Bed Ends, detachable: 01 pair
**4.4** Articulated half-length tuck away side rails : 04 Nos.
**4.5** IV Rods: 04No.s
**4.6** Mattress 12 cm Thick: 01 No.

**5. Environmental factors**
**5.1** Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
**5.2** The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of15-90%
**5.3** The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

**6**. **Power Supply**
**6.1** Power input to be 180-270VAC, 50-60Hz as appropriate fitted with Indian plug
**6.2** Resettable over current breaker shall be fitted for protection

**7. Standards, Safety and Training**
**7.1** Electrical safety conforms to standards for electrical safety IEC-60601 /IS-13450
**7.2** Should be FDA or CE or BIS approved product
**7.3** Manufacturer should have ISO certification for quality standards.
**7.4** Electric Shock Protection level-Class-B
**7.5** Electric current Protection- Class -1
**7.6** Certified to be compliant with IEC 60601-2-38 Medical Electrical Equipment part 2-38 Particular requirements for safety of electrically Operated Hospital Beds
**7.7** Should have local service facility. The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
**7.8** Comprehensive warranty for 2 years and provision of CMC for next 5 years.

**8**. **Documentation**
**8.1** Certificate of Calibration and inspection from the factory
**8.2** List of Equipment available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
**8.3** List of important spare parts and accessories with their part number and costing
**8.4** Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
The job description of the hospital technician and company service engineer should be clearly spelt out
**8.5** Service manual in English
**8.6** User manual in English
**8.7** Must submit user list and performance report within last 5 years from major hospitals.

# Item No. 4

## Pulse Oximeter with NIBP and Central Monitor

**1. Description of Function**

1.1 It should provide monitoring of NIBP & pulse oximetry with central monitoring

**2. Operational Requirements**

2.1 It should comprise of monitors at the bedside and with central station.

2.2 Capability of storage of patient data and printing of patient reports.

2.3 Demonstration of the equipment is a must.

**3. Technical Specifications**

3.1 Minimum 15 inches multicoloured TFT touch display screen.

3.2 Two digital and waveforms/ traces diplay

3.3 Should have facility to monitor and display- NIBP, $SpO_2$

*Specifications should include-monitoring of heart rate & respiratory rate in addition to above

to make it a complete monitor.

3.4 Central station for bedside monitors with independently controlled 17" multi colour TFT Monitor, complete with Ethernet LAN cabling, alarm management, 72 hours trending, bed to bed viewing of waveforms and remote alarm management like silencing of alarms etc. (OPTIONAL)

3.5 Trend of at least 48 hours

3.6 200 nos. event recall/ snapshot facility both manually and automatically triggered by alarm,

3.7 The monitors should have monitor to monitor overview facility and data transfer over the network.

3.8 Web browsing facility to review each networked monitors data through hospital LAN via office PC in hospital LAN network and/or through dial up facility from remote location (OPTIONAL)

3.9 a. Slave monitors- 21 inches in ICU - one per central station

b. Battery backup of upto 3 hours, when fully charged

3.10 Communications with Information Management Systems:

A. To provide HL -7 compatible server for sending and receiving information to and from the monitoring network to and from Hospital system, Laboratory information etc for Integration of carious informations (OPTIONAL)

B. To provide suitable facility for sending and receiving DICOM Compatible Radiological Images Like Ultrasound, X-Ray etc to and from the monitoring network to and from Hospital Information System, Radiology Information System etc for integration of various informations(OPTIONAL).

3.11 Include Laser Printer and dual channel strip chart recorder.

3.12 Specification for Monitor:

1. Portable and light weight preferably<10Kg.
2. Preconfigured with 12 inches multi colour TFT Display.
3. Monitoring Parameters,- NIBP & SaO2, RR, HR.
4. Two Digital and two waves/traces display.

5. 60 minutes or more battery backup.
6. Convenient handle for carrying the same.
7. Able to fix with bed/ trolley.

**4. System Configuration Accessories, spares and consumables**

4.1 NIBP: Adult cuff- 2nos. per monitor and two sizes of paediatric cuffs-one per monitor(complete Sets)
4.2 SpO2: Adult SpO2 sensor with cable –two nos per monitors and Paediatric SpO2 sensors- one no. Per monitor.
4.3 Necessary cabling for networking the monitors on turnkey basis.
4.4 Necessary mounting solution/ mounting on any pendant for monitors

**5. Environmental factors**

5.1 The unit shall be capable of operating continuously ambient temperature of 0 -40deg C and Relative humidity of 15-90%
5.2 The unit shall be capable of being stored continuously in ambient temperature of -20-60 deg C and relative unit of 15-90%
5.3 Shall meet IEC-60601-1-2:2001(or equivalent BIS) General Requirements of safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
5.4 The supplier shall provide environment friendly furniture and wall fittings for the entire system Cabling has to be provided by the supplier.

**6. Power supply**

6.1 Power input to be 220-240VAC, 50 Hz fitted with Indian plug.
6.2 Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications. (Input 160-260 VAnd output 220-240 V and 50 Hz)
6.3 Suitable UPS with maintenance free batteries for minimum one-hour back- up should be supplied with the system

**7. Standards, Safety and Training**

7.1 Should be US FDA, CE, UL approved product
7.2 Shall meet the safety requirements as per IEC 60601-2-27: 1994- Medical electrical equipment
Part 2: Particular requirements for the safety of electrocardiographic monitoring equipment.
7.3 Manufacturer/ Supplier should have ISO certification for quality standards.
7.4 Should have local service facility. The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance (minimum 4 times in a year) or as per the guidelines provided in the service/maintenance manual.
7.5 Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.
7.6 Comprehensive warranty for 5 years and provision of CMC for next 5 years

**8 Documentation**

8.1 User Manual in English
8.2 Service manual in English
8.3 Must submit user list and performance report within last 5 years from major hospitals of atleast 500 beds or from government institution or medical college.

8.4 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the Page/para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/ manual will not be considered.
8.5 List of Equipment available for providing calibration and routine Preventive Maintenance support as per manufacturer documentation in service/technical manual.
8.6 List of important spare parts and accessories with their part number and costing and to be blocked for 5 years
8.7 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

# Item No. 5

# Syringe Infusion Pump

Equipment Specifications for Syringe Infusion pump

**1. Description of Function**

**1.1** The Syringe Infusion Pump provides uniform flow of fluid by Precisely driving the plunger of a syringe down its barrel. It provides accurate and continuous flow rate for precise delivery of I.V. medication in critical medical care.

**2. Operational Requirements**

**2.1** The syringe pump should be programmable, user friendly, safe to use and should have battery backup and comprehensive alarm system. This should be able to integrate in the HIS
**2.2** Demonstration of the equipment is a must.

**3. Technical Specifications**

**3.1** Flow rate programmable from 0.1 to 200 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option. SAVE last infusion rate even when the AC power is switched OFF.
**3.2** Bolus rate should be programmable to 400 – 500 ml/hr or more with infused volume display. Reminder audio after every 0.5 ml delivered bolus. SAVE last Bolus rate even when the AC power is switched OFF.
**3.3** Display of Drug Name with a provision of memorizing 10~15 names by the operator
**3.4** Keep Vein Open (KVO) must be available 1.0 ml/hr or set rate if lower than 1.0 ml. User should have choice to disable KVO whenever desired.
**3.5** Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg
**3.6** Must Work on commonly available ISI/CE/FDA APPROAVED/CERTIFIED 20, 50/60 ml Syringes with accuracy of minimum of +/-2% or better.
**3.7** Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.
**3.8** Anti bolus system to reduce pressure on sudden release of occlusion
**3.9** Should have comprehensive alarm package including: Occlusion limit exceed alarm, Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre alarm and alarm, AC power failure, Drive disengaged and preventive maintenance.
**3.10** Rechargeable Battery having at least 5~6 hour backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.

**4. System Configuration Accessories, spares and consumables**

**4.1** Syringe Infusion Pump –01
**4.2** Mounting device/ Docking Station for two or four pumps as per requirement so as to enable to power up to 2-4 pumps with one power cord when mounted on IV pole. – 01

**5. Environmental factors**

**5.1** Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
**5.2** The unit shall be capable of operating continuously in ambient Temperature of 10 -40deg C and relative humidity of 15-90%
**5.3** The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%

**6. Power Supply**
**6.1** Power input to be 220-240VAC, 50Hz

**7. Standards, Safety and Training**
**7.1** Should be FDA or CE approved product
**7.2** Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements
**7.3** Manufacturer should be ISO certified for quality standards.
**7.4** Certified for meting IEC60601-2-24: Particular requirements for the safety of infusion pumps and controllers
**7.5** Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.
**7.6** Electrical Safety Classification Class I/II, Type CF and Internally powered equipment.
**7.7** Certified for meeting IEC 60601-1-4 Medical electrical equipment -Part 1- 4: General requirements for safety - Collateral Standard: Programmable electrical medical systems

**8. Documentation**
**8.1** Certificate of calibration and inspection from factory.
**8.2** List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
**8.3** User Manual in English
**8.4** Service manual in English
**8.5** Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
**8.6** List of important spare parts and accessories with their part number and costing.

## Item No. 6

## Defibrillator with ECG Monitor

**1. Description of Function**
**1.1** Defibrillator is required for reviving the heart functions by providing selected quantum of electrical shocks with facility for monitoring vital parameters.

**2. Operational Requirements**
**2.1** Defibrillator should be Bi- Phasic, light weight and latest model
**2.2** Should monitor vital parameters and display them
**2.3** Should print the ECG on thermal recorders.
**2.4** Should work on Manual and Automated external defibrillation (AED) mode Manual selection up to360 J.
**2.5** Should be capable of doing synchronized & asynchronized cardioversion
**2.6** Can be operated from mains as well as battery
**2.7** Should have defibrillator testing facility
**2.8** Demonstration of the equipment is a must.

**3. Technical Specifications**
**3.1** Should be a Low Energy Biphasic defibrillator monitor with Recorder, having capability to arrest all arrhythmia within a maximum energy of 360 Joules
**3.2** Should monitor ECG through paddles, pads and monitoring electrodes and Defibrillate through pads and paddles. Should have Automatic Lead switching to see patient ECG through paddles or leads
**3.3** Should measure and compensate for chest impedance for a range of 25 to 125 ohms
**3.4** Should have a built in 50mm strip printer/ thermal recorder
**3.5** Should have charging time of less than 3 seconds for maximum energy. Charging indicator should be there.
**3.6** Should have bright electroluminescent display for viewing messages and ECG waveform of 4 seconds
**3.7** Should have external & internal paddles with paddles contact indicator – for good paddle contact. Single Adult and pediatric paddles should be available.

**3.8** Should have event summary facility for recording and printing at least 250 events and 50 waveforms. Patient data storage 90 mins of ECG and events.
**3.9** Should have a battery capable of usage for at least 90minutes or 30 discharges.
**3.10** Should be capable of printing Reports on Event summary, configuration, self-test, battery capacity etc
**3.11** Should have facility for self-test/check before usage and set up function
**3.12** Should have SP02 and NIBP integrated facility
**3.13** Should be capable of delivering energy in increments of 1-2 joules up to
30J and increments of maximum 50J thereafter.
**3.14** Should have user friendly 1,2,3 color coded operation.
**3.15** Voice prompts on AED mode
**3.16** Printing reports of events summary configuration/set test/ battery capacity
**3.17** Optional noninvasive pacing/ transcutaneous pacing

**4. System Configuration Accessories, spares and consumablesSl Name**
**4.1** Defibrillator -01
**4.2** Paddles Adult/Paediatric (pair) -01
**4.3** Paddles –Internal (pair) -01
**4.4** Patient cable -02
**4.5** ECG Rolls -50
**4.6** Disposable pads-10 nos.
**4.7** NIBP Cuff Adult – 02
NIBP Cuff Paediatrics- 02
NIBP Cuff Infants- 02
**4.8** Reusable SPO2 Finger Probe-Adult -02
Reusable SPO2 Paediatric Finger Probe - 02
**4.9** Complete set of ECG Leads- 02

**5. Environmental factors**
**5.1** The unit shall be capable of operating continuously in ambient temperature of 10 -400 C and relative humidity of 15-90%
**5.2** The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%
**5.3** Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

**6. Power Supply**
**6.1** Power input to be 220-240VAC, 50Hz
**6.2** Resettable overcurrent breaker shall be fitted for Protection

**7. Standards, Safety and Training**
**7.1** Should be FDA or CE approved product
**7.2** Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms. (OR EQUIVALENT BIS Standard)
**7.3** Drop Test-Withstands 1 meter drop to any edge, corner or surface.
**7.4** Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.
**7.5** Should meet IEC 529 Level-2 (IP2X) for enclosure protection solid foreign object ingress.
**7.6** Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.
**7.7** Should have local service facility. The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
**7.8** Comprehensive warranty for 5 years and provision of CMC for next 5 years.

**8. Documentation**

**8.1** User Manual in English
**8.2** Service manual in English
**8.3** List of important spare parts and accessories with their part number and costing
**8.4** Certificate of calibration and inspection from factory.
**8.5** Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
**8.6** List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
**8.7** Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.
**8.8** Must submit user list and performance report within last 5 years from major hospitals

## Item No. 7

## Fibroscopic Bronchoscope –ADULT

**1. Description of Function**

**1.1** The flexible fiberoptic bronchoscope is used for diagnostic and therapeutic procedures in critically ill patients for difficult intubation.

**2. Operational Requirements**

**2.1** The flexible Fiberoptic Bronchoscope should be supplied complete with light source and trolley.
**2.2** Demonstration of the system is a must

**3. Technical Specifications**

**3.1** Light weight, high resolution bronchoscope with light cable
**3.2** Field of view 120 degrees or more
**3.3** Depth of field 3mm to 50 mm or better.
**3.4** Distal end dia 5 mm appox.(Should allow 6.5mm endotracheal tube to be mounted easily)
**3.5** Bending range UP 180 degree or DOWN 130 degree.
**3.6** Working length 600 mm or more.
**3.7** Total length 900 mm or more.
**3.8** Channel dia 2.2 mm or more.
**3.9** Autoclavable suction valve to avoid risk of cross contamination.
**3.10** Telescopic eyepiece for direct compatibility to CCTV system
**3.11** Bending mechanism knob without lock.
**3.12** Fully immersible in disinfectant solution
**3.13** Leak testing facility with automatic & pressure regulated air feeding (nonpressure gauge system preferable)
**3.14** Halogen Light Source:
a. It should be compact and light weight around 5-6 kg or less for easier transportability.
b. Should have 150 Watts halogen lamp with standby lamp option. Additional 4 nos. bulbs to be included.
c. Should be compatible with flexible endoscope.
**3.15** Video Processing System
1. Fully immersible camera head and cable assembly
2. Video processing camera.
3. 1/4 inches CCD (Closed circuit display) with 10 bit digital signal processing.
4. In built filter for compatibility with fiberoptic endoscopies
5. Resolution: 470 horizontal lines approx.
6. Signal to Noise Ratio > 50 dB.
7. Rotatable and detachable coupler(adaptor) with focussing facility.

8. Video output Y/C and composite.
9. 16 Software and hardware for recording Live and Still images (optional)

**4. System Configuration Accessories, spares and consumables**

**4.1** Flexible Fiberoptic Bronchoscope- 01
**4.2** Light Source, Halogen -01
**4.3** Mobile Plastic Operating cart- 01
**4.4** Spare Halogen Bulbs- 04
**4.5** Reusable and autoclavable biopsy forceps- 2 nos
**4.6** Cleaning/maintenance kit including container for disinfectant solution- 1 set
**4.7** Brush Biopsy (Protected)- 50 pieces.
**4.8** Foreign body forceps basket type- 2 nos.

**5. Environmental factors**

**5.1** The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
**5.2** The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
**5.3** Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

**6. Power Supply**

**6.1** Power input to be 220-240VAC, 50Hz
**6.2** Type of Protection against Electric Shock Class I (3-core cord) to be supplied for the Light Source

**7. Standards, Safety and Training**

**7.1** Product should be FDA/CE or ISI approved
**7.2** Manufacturer should be ISO certfied for quality standards.
**7.3** Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements
**7.4** Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
**7.5** Degree of Protection against Electric Shock Type BF -Should incorporate insulated patient attachment for light source.
**7.6** Certification to meeting Biocompatibility as per ISO 10993-1, "Biological evaluation of medical devices-Part 1: Guidance on selection of tests"
**7.7** Certified to meet the current leakage requirement of IEC 60601-2-18 or equivalent standard for Medical Equipment particular requirement for safety of endoscopy equipment.
**7.8** Comprehensive warranty for 2 years and provision of CMC for next 5 years.

**8. Documentation**

**8.1** User Manual in English
**8.2** Maintenance Manual in English
**8.3** Certificate of Calibration and inspection from the factory
**8.4** List of important spares and accessories with their part number and costing.
**8.5** Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

# Item No. 8

## Ventilator-portable

**1**. The portable ventilator is used to transport a patient with artificial respiration support or home care of a patient after discharge from a hospital

**2**. **Operational Requirements**

**2.1** The portable ventilator should be light weight ( < 10 kg)

**2.2** Should be microprocessor controlled, portable, light weight. Should operate with main electric supply as well as with battery. Should be able to work both with cylinders and pipeline, connectors and high-pressure tubing of appropriate length to be supplied.

**2.3** Demostration of the equipment is a must

**3. Technical Specifications**

**3.1** Should have turbine/venturi/jet mixing- technology for supplying airoxygen Mixture

**3.2** Should have following modes of ventilation: CMV, Assist-contol, SIMV, PSPEEP

**3.3** Audio-visual alarms for

a. Low supply pressure
b. High/low airway pressure
c. Leakage/disconnection
d. Power failure
e. Apnea
f. Low battery

**3.4** Should have following settings

a. TV 50 – 1500ml
b. PEEP/CPAP & PS
c. RR up to 40bpm
d. I: E ratio 1:3 to 2:1
e. FiO2 40 – 100%

**3.5** Battery backup for minimum 1 hour

**3.6** Should fix, on rails of transport trolley and on stand with wheels

**4. System Configuration Accessories, spares and consumables**

**4.1** Portable Ventilator-01

**4.2** Adult Reusable /Autoclavable Silicon Patient Circuit-02

**4.3** Paediatric Reusable/Autoclavable Silicone Patient Circuit-02

**4.4** Oxygen Hose-01

**4.5** Air Hose-01

**4.6** Rechargeable Batteries- 01 set

**5. Environmental factors**

**5.1** The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%

**5.2** The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

**5.3** Shall meet IEC-60601-1-2 :200(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility

**6. Power Supply**

**6.1** Power input to be 220-240VAC, 50Hz

**7. Standards, Safety and Training**

**7.1** Electrical safety conforms to standards for electrical safety IEC-60601 /IS- 13450
**7.2** Product should be FDA/CE or ISI approved
**7.3** Manufacturer should have ISO certification for quality standards.
**7.4** Comprehensive warranty for 2 years and provision of CMC for next 5years.

**8. Documentation**
**8.1** User Manual in English
**8.2** Service manual in English
**8.3** Certificate of calibration and inspection from factory.
**8.4** List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
**8.5** List of important spare parts and accessories with their part number and costing
**8.6** Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist.
The job description of the hospital technician and company service engineer should be clearly spelt out

## Item No. 9

# Ventilator-High End (I.C.U)

**1 Description of Function**
**1.1** ICU ventilators provide artificial respiratory support to the critical patients in the Intensive Care Units.

**2. Operational Requirements**
**2.1** Microprocessor Controlled ventilator with integrated facility for Ventilation monitoring suitable for New born to adult ventilation.
**2.2** Demonstration of the equipment is a must.

**3. Technical Specifications**
**3.1** Standard hinged arm holder for holding the circuit
**3.2** Colored TFT screen, 12 Inch or more
**3.3** Facility to measure and display
a. End tidal CO2 with capnography.
b. 3 waves- Pressure and Time, Volume and Time and Flow and Time.
c. 3 loops- P-V, F-V, P-F with facility of saving of 3 Loops for reference.
d. Graphic display to have automatic scaling facility for waves
e. Status indicator for Ventilator mode, Battery life, patient data, alarm settings, clock etc
**3.4** Trending facility for 72 hours with minimum 5 minutes resolution for recent 24 hours
**3.5** Automatic compliance & Leakage compensation for circuit and ET tube
**3.6** Following settings for all age groups.
a. Tidal Volume
b. Pressure (insp)
c. Pressure Ramp
d. Respiratory Rate
e. SIMV Respiratory Rate
f. CPAP/PEEP
g. Pressure support
h. FIO2
i. Pause Time
j. Pressure & Flow Trigger
**3.7** Monitoring of the following parameters
a. Airway Pressure (Peak & Mean)

b. Tidal volume (Inspired & Expired)
c. Minute volume (Inspired and Expired)
d. Spontaneous Minute Volume
e. Total Frequency
f. FIO2 dynamic
g. Intrinsic PEEP and PEEPi Volume
h. Plateau Pressure
i. Resistance & Compliance
j. Use selector Alarms for all measured & monitored parameters

**3.8** Modes of ventilation
a. Volume controlled
b. Pressure Controlled
c. Pressure Support
d. SIMV (Pressure Control and volume control) with pressure support
e. CPAP/PEEP
f. Inverse Ratio Ventilation
g. Advanced mode like pressure controlled volume guaranteed/dual modes/PRVC/Auto flow
h. Non Invasive ventilation
i. APRV

**3.9** Apnea / backup ventilation

**3.10** Expiratory block should be autoclavable and no routine calibration required

**3.11** Should have the ability to calculate / Procedure
a. Intrinsic Peep & Intrinsic PEEP Volume
b. Occlusion Pressure
c. Spontaneous Breathing trial
d. Facility to calculate lower and upper inflection point (OPTIONAL)

**3.12** Nebuliser with capability to deliver particle size of < 3 micron & to be used in both Off and On line

**3.13** Automatic Patient Detection facilities preferable

**3.14** Technical Specifications for reusable face mask & nasal mask. Reusable face & nasal mask with textured dual flap silicone cushion flap for easy fit. Removable forehead support and pad to match the angle of patient's forehead Stability Selector for easy fit and angle. Ball & Socket headgear attachments. Should be autoclavable.

**3.15** Battery backup for minimum 1 hour

**3.16** RS 323C interface for communications with networked devices.

**3.17** Automatic patient detection facility preferable.

**4. System Configuration Accessories, spares and consumables**

**4.1** ICU Ventilator - 01

**4.2** Adult and Paediatric autoclavable silicone breathing circuits – 02 each

(a) Reusable Masks (Small, Medium, Large) with each machine. -02 sets each

**4.3** (b) All Accessories for non-invasive ventilation – 2 sets

**4.4** Medical Air Compressor. (Optional)

**5. Environmental factors**

**5.1** The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%

**5.2** Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

**5.3** The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%

**6. Power Supply**

**6.1** Power input to be 220-240VAC, 50Hz

**6.2** Suitable Servo controlled Stabilizer/CVT
**6.3** Resettable overcurrent breaker shall be fitted for protection
**6.4** Suitable UPS with maintenance free batteries for minimum one hour back up should be supplied with the system.

**7. Standards, Safety and Training**
**7.1** Certified to be compliant with ANS/IEC60601.2.12-01 Medical Electrical Equipment—Part 2-12; Particular Requirements for the Safety of Lung Ventilators—Critical Care Ventilators
**7.2** Should be FDA or CE approved product
**7.3** Certified to be compliant with ISO-7767 for Oxygen monitoring.
**7.4** Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.
**7.5** Demonstration of quoted equipment model is a must.
**7.6** Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
**7.7** Comprehensive warranty for 2 years and provision of CMC for next 5 years.
**7.8** Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.

**8. Documentation**
**8.1** Certificate of calibration and inspection from factory.
**8.2** List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
**8.3** User Manual in English Y-11016/158/2010-PC/ECC, Y-11016/158/2010-PC/ECC Page No. 73
**8.4** Service manual in English
**8.5** Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job descriptin of the hospital technician and company service engineer should be clearly spelt out.
**8.6** List of important spare parts and accessories with their part number and costing.
**8.7** Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point ,if not substantiated with authenticated catalogue/manual, will not be considered.
**8.8** Must submit user list and performance report within last 5 years from major hospitals.
**8.9** Back to back comprehensive warranty to be taken by the supplier from the principal to supply spares for minimum 10 years.

## Item No. 10

## Transport Monitor

Equipment Specifications for Transport Monitor

**1. Description of Function**
**1.1** Transport Monitor is required to monitor vital parameters of patients during transportation to and from OT; Emergency; Trauma ambulances etc.

**2. Operational Requirements**
**2.1** Transport monitor should be portable and lightweight and should monitor vital parameters of patients.
**2.2** Capability of storage of patient data and printing of patient reports.
**2.3** Capability to integrate with the HIS and transfer the data through LAN / Wireless LAN to any other monitoring room / doctors desk. Should be HL-7 compatible for transmitting and receiving data
To / from LAN/HIS (OPTIONAL)
**2.4** Demonstration of the quoted equipment is a must

**3. Technical Specifications**

**3.1** Portable and Light weight preferably <10kg
**3.2** 12 inch multi-color TFT display
**3.3** Monitoring parameters: - ECG, respiration, NIBP, SaO2 and temperature
**3.4** Digital and 4 waves / traces display
**3.5** Monitor should have audible and visual alarms capability. Alarms should have three distinct audible alarm tones to distinguish alarm levels. Also monitor should permit automatic viewing of alarming parameter waveform and numeric from any bedside in alarm as and when connected in a network.
**3.6** Trends should be automatically stored for at least 24 hours in at least one-minute intervals.
**3.7** Numeric monitored data trend shall be viewable and recordable in a patient chart type format in at least 1, 5, 15, 60 minutes intervals.
**3.8** Convenient handle for carrying the same
**3.9** Able to fix with bed/trolley.
**3.10** NETWORKING AND REMOTE ACCESS (Optional)

a. Remote access of patient data -should have facility of accessing patient data including waveforms and numeric remotely in Hospital or at Consultants residence through hardwired LAN connection or through modem.
b. Should also offer viewing station for viewing this data as optional item.
c. Should be upgradeable.
d. Should be able to review DICOM images from PACS. On the bedside or the central station.
e. Web browsing facility to review each networked monitors data through hospital LAN via office PC in Hospital LAN network and/or through dial up facility from remote location.
f. To provide HL
g. compatible server for sending information from the monitoring network to Hospital Information System, Laboratory information etc. for integration of various information

**4. System Configuration Accessories, spares and consumables**

**4.1** Transport Monitor-01
**4.2** Patient cables (5 lead) –01
**4.3** Adult Cuff – 01
**4.4** Paediatric Cuff –01
**4.5** Adult Probe SPO2 –02
**4.6** Paediatric Probe SPO2 –02
**4.7** Skin Temp Probe –02
**4.8** Dual channel recorder –01
**4.9** Paper Recorder- 100 cases.
**4.10** Networking and remote access- (OPTIONAL)- 01

**5. Environmental factors**

**5.1** The unit shall be capable of operating continuously in ambient temperature of 10 -400 C and relative humidity of 15-90%
**5.2** The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%
**5.3** Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

**6. Power Supply**

**6.1** Power input to be 220-240VAC, 50Hz fitted with Indian plug
**6.2** Resettable over current breaker shall be fitted for protection
**6.3** Suitable UPS with maintenance free batteries for minimum one hour back up should be supplied with the system.

**7. Standards, Safety and Training**

**7.1** Should be FDA or CE approved or ISI marked product

**7.2** Shall meet the safety requirements as per IEC 60601-2-27:1994—Medical electrical equipment—Part 2: Particular requirements for the safety of electrocardiographic monitoring
**7.3** Manufacturer should have ISO certification for quality standards.

**8. Documentation**
**8.1** User Manual in English
**8.2** Service manual in English
**8.3** List of important spare parts and accessories with their part number and costing.
**8.4** Certificate of Calibration and inspection from the factory
**8.5** Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
The job description of the hospital technician and company service engineer should be clearly spelt out
**8.6** List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.

## Item No. 11

## Modular Multi Parameter Monitor

Equipment Specifications for Modular Multi parameter monitor

**1. Description of Function**
**1.1** Modular Multi parameter Monitor is used to monitor vital parameter of critical patients.

**2. Operational Requirements**
**2.1** Capability of storage of patient data and printing of patient reports.

**3. Technical Specifications**
**3.1** Minimum 15 inches multi colored TFT display screen.
**3.2** Separate CPU/Module rack.
**3.3** Eight digital and waveforms/traces display
**3.4** Combination of single, dual and multi parameter modules.
**3.5** Parameter modules freely exchangeable between all the monitors.
**3.6** Multi-channel (up to 12 leads) ST segment analysis.
**3.7** Facility to monitor and display - ECG, Respiration, NIBP, SPO2, CO2 with capnography, Temp, Cardiac output (optional), NMT(Optional), BIS/Entropy (optional), EEG (optional), Gastrictonometry (optional) & IBP – 2 nos.
**3.8** Automatic arrhythmia detection & alarm for standard and lethal arrhythmia.
**3.9** EtCO2 -Main stream/ side stream. Display both inspired and expired values, showing capnography.
**3.10** NMT Module/monitor: For measurement and display of TOF count,TOF %, ST, DBS, Tetanic and Trend for continuous usage. Automatic measurement facility in selected time interval. Automatic selection of supramaximal current. Include standard accessories (Optional).
**3.11** EEG Module with all accessories. (Optional)
**3.12** Should provide hemodynamic, oxygenation, Ventilation calculation package.
**3.13** Should have drug calculation package. (Optional)
**3.14** Trend of at least 48 hours.
**3.15** 200 nos. event recall/snapshot facility both manually and automatically triggered by alarm.
**3.16** Automatic Zoom In Facility in the monitor display.
**3.17** The monitors should have monitor-to-monitor overview facility and data transfer over the network.
**3.18** Web browsing facility to review each networked monitors data through hospital LAN via office PC in Hospital LAN Network and/or through dial up facility from remote location (OPTIONAL)
**3.19** Communications with Information Management Systems:
a. To provide HL-7 compatible server for sending and receiving information to and from the monitoring network to and from Hospital Information System, Laboratory information etc for integration of various information (OPTIONAL)

b. To provide suitable facility for sending and receiving DICOM Compatible Radiological Images like Ultrasound, X-Ray etc to and from the monitoring network to and from Hospital Information System,Radiology Information System etc for integration of various information (OPTIONAL).

**3.20** Integrated or external printer for report output.

**4. System Configuration Accessories, spares and consumables**

**4.1** ECG/Resp: 5 Lead ECG Cable with clip- 2 sets per monitor and 10 Lead ECG Cable with clip- 1 set per monitor.

**4.2** NIBP: Adult cuff- 2nos. per monitor and two sizes of pediatric cuffs- one per monitor (complete sets)

**4.3** SPO2: Adult SPO2 sensor with cable- two nos. per monitor and Pediatric SPO2 sensors- one no. per monitor.

**4.4** IBP: Include four nos. per monitor of reusable pressure transducer with bracket, holder and 100 nos. disposable domes per monitor.

**4.5** Temperature: Rectal temperature probe- two per monitor and skin temperature probe- one per monitor.

**4.6** EtCO2 module with all accessories. In case of side stream EtCO2-10 sets of sampling tubes for each module to be included.

**4.7** Cardiac Output: Should be by thermodilution method with all accessories

**4.8** EEG Modules- with all accessories. Should display at least two channels (optional).

**4.9** BIS/Entropy Module: Adult Sensors-200 numbers. Spectral analysis modules by compressed spectral array (optional).

**4.10** Necessary cabling for networking the monitors on turnkey basis.

**4.11** Necessary mounting solution/ mounting on any pendant for monitors

**5. Environmental factors**

**5.1** The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%

**5.2** The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90%

**5.3** Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC directive.

**6 Power Supply**

**6.1** Power input to be 220-240VAC, 50Hz fitted with Indian plug

**6.2** Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.( Input 160-260 V and output 220-240 V and 50Hz)

**6.3** UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system

**7. Standards, Safety and Training**

**7.1** Should be FDA, CE,UL or BIS approved product

**7.2** Shall meet the safety requirements as per IEC 60601-2-27:1994—Medical electrical equipment—Part 2: Particular requirements for the safety of electrocardiographic monitoring equipment.

**7.3** Manufacturer/Supplier should have ISO certification for quality standards.

7.4 Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

**7.5** Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.

**7.6** Comprehensive warranty for 2 years and provision of CMC for next 5 years.

**8. Documentation**

**8.1** User Manual in English

**8.2** Service manual in English

**8.3** Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.
**8.4** Must submit user list and performance report within last 5 years from major hospitals.
**8.5** List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
**8.6** List of important spare parts and accessories with their part number and costing.
**8.7** Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

## Complete Monitoring System for ICU

Equipment Specifications for Complete Monitoring System for ICU

**1. Description of Function**
**1.1** Critical patients need to be monitored continuously in ICU at the bedside as well as at the central nursing station.

**2. Operational Requirements**
**2.1** ICU should comprise of monitors at the bedside and with central station.
**2.2** Capability of storage of patient data and printing of patientreports.
**2.3** Demonstration of the equipment is a must.

**3. Technical Specifications**
**3.1** Minimum 15 inches multi colored TFT display screen.
**3.2** Separate CPU/Module rack.
**3.3** Eight digital and waveforms/traces display
**3.4** Combination of single, dual and multi parameter modules.
**3.5** Parameter modules freely exchangeable between all the monitors.
**3.6** Multi-channel (up to 12 leads) ST segment analysis.
**3.7** Facility to monitor and display - ECG, Respiration, NIBP, SpO2, CO2 with capnography, Temp, Cardiac output (optional), NMT (Optional), BIS/Entropy (optional), EEG (optional) & IBP – 3 Nos.
**3.8** Automatic arrhythmia detection & alarm for standard and lethal arrhythmia.
**3.9** EtCO2 -Main stream/ side stream. Display both inspired and expired values, showing capnography.
**3.10** NMT Module/monitor: For measurement and display of TOF count, TOF %, ST, DBS, Tetanic and Trend for continuous usage. Automatic measurement facility in selected time interval. Automatic selection of supramaximal current. Include standard accessories (Optional)
**3.11** EEG Module with all accessories. (Optional)
**3.12** Central station for bedside monitors with independently controlled. 17" multi-color TFT Monitor, complete with Ethernet LAN cabling, alarm management, 72 hours trending, bed to bed viewing of waveforms and remote alarm management like silencing of alarms etc.
**3.13** Should provide hemodynamic, oxygenation, Ventilation calculation package.
**3.14** Should have drug calculation package.
**3.15** Trend of at least 48 hours.
**3.16** 200 nos. event recall/snapshot facility both manually and automatically triggered by alarm.
**3.17** Automatic Zoom In Facility in the monitor display.
**3.18** The monitors should have monitor-to-monitor overview facility and data transfer over the network.
**3.19** Web browsing facility to review each networked monitors data through hospital LAN via office PC in Hospital LAN Network and/or through dial up facility from remote location (OPTIONAL)
**3.20** CRT Slave monitors- 21 inches in ICU - one per central station
**3.21** Communications with Information Management Systems:

a. To provide HL-7 compatible server for sending and receiving information to and from the monitoring network to and from Hospital Information System, Laboratory information etc for integration of various information (OPTIONAL)

b. To provide suitable facility for sending and receiving DICOM Compatible Radiological Images like Ultrasound, X-Ray etc to and from the monitoring network to and from Hospital Information System, Radiology Information System etc for integration of various information (OPTIONAL).

**3.22** Include Laser Printer and dual channel strip chart recorder.

**3.23** Specifications for Transport Monitor:

a. Portable and light weight preferably< 10 kg.
b. Modular with 12 inches multi-color TFT Display.
c. Monitoring Parameters - ECG, Respiration, NIBP, SaO2 and temperature.
d. Digital and six waves/traces display.
e. Trends up to 24 hours.
f. 60 minutes or more battery backup.
g. Convenient handle for carrying the same.
h. Able to fix with bed/ trolley.

**4. System Configuration Accessories, spares and consumables**

**4.1** ECG/Resp: 5 Lead ECG Cable with clip- 2 sets per monitor and 10 Lead ECG Cable with clip- 1 set per monitor.

**4.2** NIBP: Adult cuff- 2nos. per monitor and two sizes of pediatric cuffs- one per monitor (complete sets)

**4.3** Reusable SPO2: Adult SPO2 sensor with cable- two nos. per monitor and Pediatric SPO2 sensors- one no. Per monitor.

**4.4** IBP: Include four nos. per monitor of reusable pressure transducer with bracket, holder and 100 nos. Disposable domes per monitor.

**4.5** Temperature: Rectal temperature probe- two per monitor and skin temperature probe- one per monitor.

**4.6** EtCO2 module with all accessories. In case of side stream EtCO2-10 sets of sampling tubes for each module to be included.

**4.7** Cardiac Output: Should be by thermodilution method with all accessories

**4.8** EEG Modules- with all accessories. Should display at least two channels (Optional)

**4.9** BIS/Entropy Module: Adult Sensors-200 numbers. Spectral analysis modules by compressed spectral array.(Optional)

**4.10** Necessary cabling for networking the monitors on turnkey basis.

**4.11** Necessary mounting solution/ mounting on any pendant for monitors

**5. Environmental factors**

**5.1** The unit shall be capable of operating continuously in ambient temperature of 10 –40 deg C and relative humidity of 15-90%

**5.2** The unit shall be capable of being stored continuously in ambient temperature of 0 –50 deg C and relative humidity of 15-90%

**5.3** Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC directive.

**5.4** The supplier shall provide environment friendly furnitures and wall fittings for the entire system. Cabling has to be provided by the supplier.

**6. Power Supply**

**6.1** Power input to be 220-240VAC, 50Hz fitted with Indian plug

**6.2** Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications. (Input 160-260 V and output 220-240 V and 50 Hz)

**6.3** Suitable UPS with maintenance free batteries for minimum one-hour back up should be supplied with the system.

**7. Standards, Safety and Training**

**7.1** Should be FDA, CE, UL or BIS approved product

**7.2** Shall meet the safety requirements as per IEC 60601-2-27:1994—Medical electrical equipment—Part 2: Particular requirements for the safety of electrocardiographic monitoring equipment.

**7.3** Manufacturer/Supplier should have ISO certification for quality standards.

**7.4** Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

**7.5** Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.

**7.6** Comprehensive warranty for 2 years and provision of CMC for next 5 years.

**8. Documentation**

**8.1** User Manual in English

**8.2** Service manual in English

**8.3** Must submit user list and performance report within last 5 years from major hospitals.

**8.4** Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.

**8.5** List of Equipments available for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.

**8.6** List of important spare parts and accessories with their part number and costing.

**8.7** Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out

## Item No. 12

## PORTABLE ULTRASOUND WITH COLOUR DOPPLER SYSTEM

DICOM compatible fully digital, compact portable Colour Doppler Ultrasound machine is required with the following technical features:

1. The unit should be compact, lightweight and portable. Weight should not exceed 10kg excluding cart and accessories.
2. It should be suitable for abdominal, small parts and vascular applications in adults and pediatric patients.
3. It should be compatible with a Laparoscopy Probe.
4. Multiple preloaded as well as user configurable application presets should be available.
5. It should have 128 or more digital channels for image formation and acquisition.
6. Transducers: Three (1) Convex 5-2 MHz for abdominal imaging, (2) Linear 13-6 MHz for intra-op imaging,(3) Micriconvex 5-2 MHz for Echocardiography (4) Endocavitory 8-5 MHz for transrectal ultrasonography and end firing biopsy, one each.
7. All transducers should be lightweight digital phased array broadband type transducers with at least 128 elements.
8. Detachable needle guide should be available with convex and endocavitory probes.\
9. Imaging modes of Real time 2D, Colour Doppler, Pulsed wave Doppler, Power (energy) Doppler and triplex Doppler should be available.
10. Advanced features such as tissue harmonic imaging with contrast media and compound beam forming technology should be available.
11. Controls for 2D mode: Total gain, depth, TCG, dynamic range, acoustic power output, number for position of focus.

12. Controls for Colour Doppler: PRF, colour gain, position and size of ROI, steering of ROI, colour maps and colour invert.
13. Controls for pulsed Doppler: variable sample volume size from 1 to 5mm or more, steer, PRF, baseline,gain angle correction, spectral invert, duplex/triplex on/off
14. Measurements for 2D mode: Multiple distances, area and volume.
15. Measurements for Doppler modes: Stenosis quantification in percentage, diameter, PSV, EDV, mean,PI, RI, floor volume, acceleration time and index. Automatic and manual measurements and display of pulsed Doppler Calculations should be possible.
16. Cineloop memory of minimum 10 seconds on all modes.
17. Flat LCD/TFT monitor of at least 10 inches.
18. Alphanumeric soft keys keyboard with easy access scans controls and trackball.
19. Onboard storage of at least 1000 images. Storage in JPEG and AVI format should be possible.
20. Sorting of data base with patient name and date should be possible.
21. USB port connectivity to printer or computer.
22. Facility for storage on CDR should be available.
23. Unit should function with 200-240 V, 50 Hz AC, 5 amp power outlets. Power requirement to be specified.
24. In built battery backup for at least three hours use should be available
25. The unit should be compatible with and should have facilities for interfacing with the hospital LAN.
26. Essential accessories: Thermal colour printer, UPS, mobile cart with transducer holder, jelly bottle holder and space for printer.
27. Paper and cartridges for 1000 image printouts should be provided.
28. The unit offered must be sturdy and should be able to withstand accidental hits and falls during transportation.
29. The unit offered in the tender will require technical demonstration.
30. List of users of unit offered should be enclosed along with the tender. The list should not contain names of users of units other than the one quoted.
31. Price of the main unit and accessories to be quoted separately.
32. Warranty: The unit, transducers and all accessories should be covered with comprehensive onsite warranty for two (2) years commencing from the date of issue of installation certificate.
33. Rates for comprehensive maintenance contract CMC (including all spared and labour) for 5 years, after expiry of warranty period, must be quoted separately.
34. Photocopy of purchase order along with terms and conditions of contract received from any Govt/Public Sector institution in the last two years for supply of the offered equipment must be enclosed with the price bid.

## Item No. 13

## COLOR DOPPLER ECHOCARDIOGRAPHY SYSTEM

**1. Description of function**

**1.1** Color Doppler Echocardiography System is required to study the anatomical abnormalities and blood flow in the heart and associated vessels.

**2. Operational requirements**

**2.1** Latest generation Electronic Phased array Color Doppler system with Minimum 512 Electronic independent channels. System should be DICOM ready and capable of being interfaced with HIS/RIS/PACS..

**2.2** Should be field up gradable to next generation system on site.

**2.3** Frequency compounding or better technology for better resolution and penetration.

**3. Technical Specifications**

**3.1** Latest generation Electronic Phased array Color Doppler system with Minimum 512 Electronic independent channels.

3.2 256 gray shades for sharp contrast resolutions

3.3 Multi-dimensional Beam former for generating two images simultaneously one at low end of bandwidth and one at high end then selectively retrieves and mixes the components together for finely textured 2-D or B mode image with superior contrast resolution.

3.4 Adult Cardiac and Vascular Probes to be supplied which should be latest generation wide band transducers without frequency selection for higher sensitivity of response over a broader frequency range of operation. All probes to be phased array OPTIONAL Probes for paediatric application and Transesophageal Echo for future requirement.

3.5 Harmonic Imaging- System should have following modes in harmonic with separate setting for:

Tissue Harmonic.
Contrast Harmonic - both triggered and real time
Harmonic Angio .
Quantification of harmonics imaging

3.6 Harmonic imaging capability in Adult Cardiac, Paediatric Cardiac and linear probe

3.7 Gain control in two dimensions for additional level of flexibility to image quality control.

3.8 Real time high frequency 2D for higher resolution and low frequency Doppler for higher sensitivity in all probes

3.9 Frame rate should be 300 FPS or more

3.10 Steerable PW/CW in all Phased Array probes.

3.11 High definition acoustic zoom for enlarging sections of 2D and Colour flow images with more acoustic information for greater clarity and detail while maintaining an optimal frame rate.

3.12 Modes - 2D, M-Mode, Steerable PW/CW Doppler, Colour Doppler, and High Definition Colour flow with capability of automatically picking up colour flow as a function of focal depth

3.13 Monitor should be 15" or more, high resolution colour Monitor. Tilt and Swivel monitor should be able to view in all angles and all light conditions.

3.14 Colour Flow Imaging for

a) Increased lateral & spatial resolution.
b) Detection of even subtle areas of turbulence, displaying a more physiological blood flow appearance without loss of frame rate.
c) Colour flow with capability of automatically picking up colour flow as a function of focal depth

3.15 Tissue Colorization (B-Colour) for improved contrast resolution

3.16 Application software for Adult, Pediatric, Fetal and Peripheral Vascular and Transesophageal applications. (All application package should be built into the system)

3.17 Cine loop memory- more than 120MB of memory. High Frame rate review for better clarity of playback images study in slow motion. Quad loop with memory for pre and post image comparison of any procedure. Memory- 256 frames or more in quad loop. M Mode & Doppler Scroll Memory- 40
seconds or more. Frame grabber facility for post analysis.

3.18 Various maps for pre and post processing.

3.19 ECG trigger facility.

3.20 User defined system and application presets for multi-user department.

3.21 Minimum 4.8 GB optical disc drive for image storage and retrieval. (standard with system)

3.22 Dedicated integrated dynamic stress echo package for flexible user defined protocols with stacked sub loops facility and contrast stress protocol.

3.23 Tissue movement colorization with quantification possibility for IHD/CAD patients.

3.24 Three transducer ports will be preferred.

3.25 Color Map resolution up to 128 levels.

3.26 Study Manager (> 1.5 GB) for on-cart digital acquisition, review and editing of complete patient studies.

3.27 Facility of Real time perfusion studies

3.28 SYSTEM PERIPHERALS should include
CD Writer with calculation facility on playback.
Color Video Printer.
B/W Thermal Printer.
3.29 Colour M-Mode

**4. System Configuration Accessories, spares and consumables**

4.1 Color Doppler System with all application packages Quad loop for serial studies with High frame rate review. Harmonic imaging capability in all modes. (Tissue, Contrast, Anglo)
Integrated Stress Echo Package Digital Storage and Retrieval- 01
4.2 ***1.0-3.0*** MHz Adult Cardiac probe Electronics Phased Array probe.-01 each
4.3 ***3.0-11.0*** MHz Electronics Phased Array Probe for Vascular applications- 01each
4.4 Multi-plane TEE Probe- (Optional) 4-8 MHz for Adult as well as Paediatric echocardiography.
4.5 5.0-10 MHz Electronic phased array probe for Paediatric cardiology.(OPTIONAL)
4.6 DVD/CD Recorder with 100 CDs and 100 DVDs
4.7 Color Printer. -01
4.8 B/W Video Thermal Printers -01
4.9 Colour Print Paper- 500 sheets
4.10 B/W Thermal Paper - 10 rolls
4.11 ECG Cable - 02
4.12 MO Disc - 10
The system should contains all the above accessories Integrated or as separate accessories.

**5. Environmental factors**

5.1 The unit shall be capable of operating continuously in ambient temperature of 300 C and relative humidity of 80%
5.2 Pre Requsites should be clearly spelt out in terms of room requirements.

**6. Power supply**

6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2 Resettable overcurrent breaker shall be fitted for protection
6.3 Suitable Servo controlled Stabilizer/CVT
6.4 UPS of suitable rating conforming to IS-302 shall be supplied. Servo stabilizer is not required if the UPS has voltage correction facility.

**7. Standards and safety**

7.1 Should be FDA or CE approved product
7.2 Electrical safety conforms to standards for electrical safety IEC-60601 /IS-13450
7.3 The product shall comply to IEC 60601-2-37 ed1: Medical Electrical
Equipment - Part 2-37: Particular Requirements for the Safety of Ultrasonic
Medical Diagnostic and Monitoring Equipment
7.4 Type of protection against electric shocks -- Class I Degree of protection against electric shocks for ultrasound probes Type "BF" For ECG electrodes Type 'CF"
7.5 The manufacturer should have ISO certification for quality standards.

**8. Documentation**

8.1 User manual in English
8.2 Service manual in English
8.3 List of important spare parts and accessories with their part number and costing.
8.4 Certificate of calibration and inspection from factory.
8.5 Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out
8.6 List of equipments available for calibration and preventive maintenance as laid down in the Technical/Service Manual.

# Item No. 14

# Upper GI Endoscope

Equipment Specifications for Upper GI Endoscope

**1. Description of Function**

**1.1** Gastroscopes are used to view and administer therapy to the interior of the oesophagus and the stomach for diagnosing and managing upper-GI disorders (e.g., ulcers and other lesions). Therapeutic GI procedures performed through the scope's working channels typically include biopsies, electrosurgery, and laser surgery.gastroscopes, duodenoscopes, and choledochoscopes—also called upper-gastrointestinal (GI) endoscopes—

**2. Operational Requirements**

**2.1** Upper GI Scope compatible with commonly used camera and light sources is required.

**3. Technical Specifications**

**3.1**

1. Direction of view should be zero degree.
2. Minimum of 130 degree of field of view.
3. Range of observation atleast from 5 mm to 90 mm.
4. Angulations of tip up at least 180 degrees and down 90 degrees with right and left movement of at least 100/100 degrees.
5. Insertion tube diameter of less than 10 mm .
6. Distal end diameter of not more than 10.5 mm
7. Instrument channel of more than 2.5 mm
8. Working length of not less than 1000mm
9. Should be compatible with the video system specified
10. Video Processor

    __Digital Signal Processing for signal received from a colour CCD chip.

    __Compact Light weight (9-10 Kg) and ergonomically designed.

    __Able to display high resolution & real color imaging.

    Output: RGB, Y/C, Composite (with Simultaneous Output Possibility

    Colour adjustment: Chroma (Red & Blue Color) control with approx. 14 increments

    Edge/Structure ENH : 4 to 8 levels of switchable settings (for Both edges &structures)

    Image Display Size: 3 or 4 different sizes of Image display on monitor possible for Small /Medium/ procedural Convenience Full Height)

    Users Data Preset :For individual user's setting of functions(5 or more users)

    Scope's Identification : Data such as scope's model and serial number comments, Cumulative uses check period, owner, Customers ID etc.

    Memorization of: the setting for functions such as Color, Enhancement, Irish, Selected Setting White balancing etc. retainable when power is off/on.

11. Xenon Light Source (300 Watt)

    Automatic Brightness Control : With Servo Diaphragm Method

    Internal Memorization battery : For Storing Selected Settings in Light Source even if the Power is off.

    Main Lamp : Xenon Short-arc Lamp (300 Watts) with Switching Regulator Mechanism.

    Main Lamp Life : Appx. 500 hrs on continuos use

    Emergency Lamp : Halogen 12V 100 Watts with apprx 100hrs or more life.

    Power Supply : 220-240 V Ac,Freq 50/60 Hz,Input Current 3A

    Weight : Around 15-16 Kg or less LCD Monitor

    14'' Flat Screen color LCD Monitor(high Resolution)

**4. System Configuration Accessories, spares and consumables**

**4.1** System as specified

**4.2** 1. Biopsy forceps :3 each
2. Foreign body grasper (basket type) 2
3. Polypectomy snare:2
4. Standard tip canula:2 types – 10 each
5. Sphincterotome for side viewing duodenoscope only (wire guided, triple lumen) – 1085
6. Mechanical lithotripter :5
7. Polypectomy cautery system :1
8. Guide wires 2 types ( 0.025 "F, 0.035 " in diameterF); length 450 cm, nonkinkable with stripes to detect movement – 5
9. Basket for retieving stones with memory filaments – 5
10. Balloons 11mm diameter and wire guided – 5
11. Double pigtail stents – 7 cm, 10 cm long; 7 F and 10 F diameter – each 10
12. Stents – straight 7 F and 10F; 7 cm and 10 cm long – each 10 in number

**5. Environmental factors**

**5.1** The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%

**5.2** The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

**6. Power Supply None**

**7. Standards, Safety and Training**

**7.1** Shall be certified to be meeting safety standard IEC 60601-2-18 part 2 Particular requirements for the safety of endoscopic equipment.

**7.2** Should be FDA , CE,UL or BIS approved product

**7.3** Manufactures/Supplier should have ISO certificate to Quality Standard.

**7.4** Comprehensive warranty for 2 years and 5 years CMC after warranty

**8. Documentation**

**8.1** User/Technical/Maintenance manuals to be supplied in English.

**8.2** Certificate of calibration and inspection.

**8.3** List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

**8.4** List of important spare parts and accessories with their part number and costing.

**8.5** Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

## Item No. 15

## Open Care System for Neonates

**1. Description of Function**

**1.1** Required for care of new born and infants

**2. Operational Requirements**

**2.1** Complete system with cart and oxygenation facility is required.

**3. Technical Specifications**

**3.1** Essential parts: Cart & bassinet warming system with controls & alarms

Examination light Storage space- 2 sliding drawers below bassinet 2 platforms of the size 9" x 12" capable of holding up to 5 Kg of equipment

Cart: Should swivel on 4 wheels of at least 5" dia- with foot operated, 2 front lockable wheels.

Dimensions

Height: 180-200 cm
Width: 60-70 cm
Depth: 100-120 cm
Working level: 95-110 cm and adjustable
Bassinet: 1 fixed and 3 movable transparent side walls
: Portion above X-Ray cassette holder radiolucent
Mattress
Width: 55 – 60 cm
Length: 65- 70 cm
Thickness: Minimum 4 cm
Material: Soft, Comfortable, easy to clean,radiolucent
Bassinet tilt in steps of 6 – 8 degrees, Trendelenburg or reverse Trendelenburg
Warmer module swivel : 45-65 degrees on either side Warming systems
Modes :Manual & skin
Manual mode: Adjustable in steps from zero to 100
Skin mode
Method : Flexible, unbreakable skin temperature probe Set
Point range : 34 – 38 degrees C
Skin temp variability at Temperature equilibrium: + 0.2 degrees C
Skin temperature display Accuracy: + 0.2 degrees C
Type: digital LED with 0.1 degree resolution
Correlation of displayed and actual skin temp : difference __0.2 degrees C
Silence/ Reset switch: To silence the alarm & reset set point Alarms
Probe failure, Heat failure, High and low temperature, Power failure, System failure
Examination light : Illuminance 100 foot candles at mattress center
Storage space : 2 drawers, preferably covered and sliding
Pulse oximeter : to measure oxygen saturation and heart rate resistant to motion 88 artifact. Able to pick up signals in low perfusion states.
CPAP system : Flow driven With air oxygen blender and FiO2 control, with heated humidifier, airway pressure display 0-15 cm H2O, With bonnet, cap and nasal prongs (10 of each size) for babies 600 gm-4000 gms, with reusable circuits, with 1 reusable flow generator
Power requirement : 220/240 V AC, 50/60 Hz,
Accessories
I.V. line pole with pivot bracket: should be able to accommodate 2 fluid bottles
Monitor shelves: 2 in number
Should support up to approx. 20 kgs per shelf or upto 25 kgs total on single side
Standard X- Ray cassette holder: sliding holder located just below under surface
of Bassinet, with markings to help placement of cassette
Patient Probes: 4 reusable temperature probes
4 reusable oxygen saturation probes
2 patient extension cables for the saturation probes

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**4. System Configuration Accessories, spares and consumables**

**4.1** System as specified

**4.2** All consumables required for installation and standardization of system to be given free of cost.

**5. Environmental factors**

**5.1** The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%

**5.2** The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

**6. Power Supply**

**6.1** Power input to be 220-240VAC, 50Hz fitted with Indian plug

**6.2** UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.

**7. Standards, Safety and Training**

**7.1** Should be FDA , CE,UL or BIS approved product

**7.2** Manufacturer/Supplier should have ISO certification for quality standards.

**7.3** Comprehensive warranty for 2 years and 5 years CMC after warranty. CMC would include all electronic and mechanical items including PCBs and heater elements. It should provide every year per unit four reusable temperature probes, four oxygen saturation monitor probes, 20 Flow generator, and CPAP circuit. Prices for all consumables – temperature probes, saturation probes, extension cable, heater element, halogen bulb, nasal prongs, bonnet, cap. Flow generator, and CPAP circuit should also be quoted separately and should be valid for 7 years

**7.4** Comprehensive training for lab staff and support services till familiarity with the system.

**8. Documentation**

**8.1** User/Technical/Maintenance manuals to be supplied in English.

**8.2** Certificate of calibration and inspection.

**8.3** List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

**8.4** List of important spare parts and accessories with their part number and costing.

**8.5** Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out

## Item No. 16

## Haemodialysis Machine

Equipment Specifications for Haemodialysis Machine

**1. Description of Function**

**1.1** Haemodialysis, is a method for removing waste products such as potassium and urea, as well as free water from the blood when the kidneys are incapable of this (i.e. in renal failure). It is a form of renal dialysis and is therefore a renal replacement therapy.

**2. Operational Requirements**

**2.1** Machine should have facility for Acetate, Bicarbonate, Sequential dialysis (Isolated UF)

**2.2** Upgradable to future software developments and can be linked with Patient Data Management System

**2.3** The blood pump should run even in the absence of water or dialysate flow.

**3. Technical Specifications**

**3.1** Should have facility for conventional and High flux dialysis.

**3.2** Machine should have two bacterial filter (Pyrogen filters) one at water inlet and one before water going to dialyser

**3.3** Battery back-up for 20-30 minutes to run complete machine with heater supply

**3.4** Should have Na, Bicarbonate and UF profiling

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**3.5** Dialysate temperatures selectable between 35 degrees C to 39 deg. C

**3.6** Variable conductivity setting between 12 to 15

**3.7** Should have variable dialysate flow 150 ml/mt

**3.8** Should have facility to show trends curve of all parameter for 15-20 minutes

**3.9** Heparin pump with syringe sizes up to 50 ml with pump flow rate from 1-10 ml/hr( 0.1 ml increments)

**3.10** Stroke pressure operated short term single needle dialysis

**3.11** Ultrafiltration 0.1 to 2.5 litres/hr. .The in and out fluid circuit must be separated so that there is no chance of contamination in the event of membrane rupture.
**3.12** Treatment parameter should be displayed by graph and digitally both
**3.13** Should have integrated heat (800C) and chemical disinfection facility.
**3.14** Should have accurate feedback control conductivity mixing technique.
**3.15** Should have drain facility.
**3.16** Should have accurate UF control by flow measurement technique.
**3.17** Extra facilities like Blood Volume sensor, Bicart Select technique and online clearance kt/V
**3.18** All important data should be presetted so that machine can be used anytime without feeding data every time
**3.19** Should have automatic self-test facility
**3.20** Should have auto ON/OFF Facility
**3.21** Should have touch button screen
**3.22** Easy to service, troubleshoot and calibrate
**3.23** Machine can be connected to computer to feed all data and trouble shoot whenever any problem
**3.24** Blood pump rate from 20-500 ml/min adaptable to standard, A-V bloodliness
**3.25** Ability to monitor pulse rate and NIBP with graphic and tabulated trends.
**3.26** Audio visual alarms on limit violation of conductivity, blood leak, air leak, transmembrane pressure alarms, Dialysis temperature alarm, dialysis can empty alarm, end of disinfection alarm by pass alarm and blood pump stop alarm
**3.27** Alarm for reverse Ultrafiltration.

**4. System Configuration Accessories, spares and consumables**
**4.1** System as specified-
**4.2** All consumables required for installation and standardization of system to be given free of cost.
**4.3** To be supplied free of cost Bacterial filters– 2 sets extra , 100 polysulfone, 1 m2 dialyzers and tubing's

**5. Environmental factors**
**5.1** The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
**5.2** The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

**6. Power Supply**
**6.1** Power input to be 220-240VAC, 50Hz fitted with Indian plug
**6.2** UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.

**7. Standards, Safety and Training**
**7.1** Should be FDA , CE,UL or BIS approved product
**7.2** Manufacturer/Supplier should have ISO certification for quality standards.
**7.3** Shall comply with IEC 60601-2-16 SAFETY requirements of medical electric equipment part2-particular requirements for the safety of Haemodialysis equipment.
**7.4** Comprehensive warranty for 2 years and 5 years CMC after warranty
**7.5** Comprehensive training for lab staff and support services till familiarity with the system.
**7.6** Should have local service facility .The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

**8. Documentation**
**8.1** User/Technical/Maintenance manuals to be supplied in English.
**8.2** Certificate of calibration and inspection.
**8.3** List of Equipment available for providing calibration and routine Preventive Maintenance Support, as per manufacturer documentation in service/technical manual.
**8.4** List of important spare parts and accessories with their part number and costing.

**8.5** Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out

## Item No. 17

## Operation table with accessories

Multipurpose powered, mobile Table with divided leg section suitable for all major surgical procedures, complete with 5cm mattress and corded handset. The table should be completely oil-free for better and clean operation & maintenance.

**General operating table features:**

Full-length radio-translucent top with integral X-ray cassette tunnel, accessible from either end.

1. Tabletop should be made of a special scratch resistant, hardwearing and easy to clean material. Base column cover to be made of 100□ □stainless steel alloy and stainless steel.
2. Removable & interchangeable head and leg sections with an auto-locking mechanism to suit different applications.
3. 100% Kidney Bridge position should be obtained without moving the patient, thru' remote Control by using extension/break function.
4. Battery powered, with facility for connection to mains electricity for immediate use. Battery Exhaustion protection and low battery warning via an audible 'beep' should be available.
5. Table should not have a thread/sharp edge for ensuring proper cleaning and user safety. Table Top / Base should not have welding and should be joints free.
6. Mattress should be of high quality that spans tabletop break for improved patient support. Its depth should be 50mm. Mattress must be Latex free.
7. The robust handset should offer 8 controls namely Trend. /Reverse Trend, Lateral Tilt, Flexion/ Extension and Height functions.
8. Brakes, 5nos Wheels for 360º rotation & Castors should be controlled by 2 foot-pedals, located at both ends of Table base.
9. Table should have a narrow T-shaped base allowing optimum access and greater stability.
10. Table should have offset slim-line column, with S.S. Inverted telescopic covers, for superior imaging and access.
11. It should have a stable construction of the base with large twin-disk castors for easy motion and manoeuvring (base braking by locking the twin-disk castors at the head end via a central foot pedal).
12. The table top should not be fitted with transverse members casting shadows on the X-ray images except for the release brackets for adjustment on either side.
13. The Table should be operated by the following operating elements: corded hand control, override panel, footswitch, IR remote control (optional).

**Electrical specification:**

Special-design, maintenance-free rechargeable batteries with capacity for about a week's use in the operating room.

Recharging of the batteries and supply of the operating table by means of a mains cord

Nominal mains voltage (selectable) 100/110-115/127/200/220/230-240V AC via mains cord.

| | |
|---|---|
| Length | 2000-2100 mm |
| Width | 580-600 mm |
| Minimum height (without mattress) | 600-650 mm |
| Maximum height (without mattress) | 1100-1200 mm |
| Maximum lateral tilt | 25-30 deg. (either side) |
| Maximum trendelenburg | 40 - 45deg. |

| | |
|---|---|
| Maximum reverse trendelenburg | 40 - 45 deg. |
| Head section adjustment | ±40-45 deg. |
| Leg section adjustment | +50 deg; to -110 deg |
| Break (extension) position | 210 deg |
| Break (flexion) position | 130 deg |
| Maximum patient weight | 250 kg |
| Maximum weight of accessories | 20 kg |

**Technical Specification-**
**Accessories**

| | |
|---|---|
| Operating table top for Babies and Infants to be fixed on the main Table | 1 |
| Arm board | 2 |
| Lithotomy leg holders "Geopel type" (adult and paediatric) | 1 set each |
| Body strap | 3 |
| Anaesthesia screen | 2 |
| Clamp, rotary | 4 pc |
| Clamp, circular | 4pc |
| Accessories stand, mobile on castors | 1pc |
| Arm support, perplex | 2pc |
| X-Ray cassette tray | 1pc |

## Item No. 18

## Surgical Diathermy with accessories

1. Monopolar, Bipolar cutting and under water cutting
2. Small, Compact & Portable
3. Digital display for power settings
4. Soft, Forced and Spray coagulation (pure and blend type)
5. Automatic Power Regulation
6. Bipolar coagulation with manual mode and auto start mode
7. Programmable power settings
8. Meets safety standards as provided by IEC
9. Monopolar and bipolar function should be operable without switching off the other mode
10. Auto self-test whenever the units switched on.
11. The whole unit must be comfortably placed on a trolley designed to house the machine. The trolley must be mounted on wheel for noiseless, smooth, effortless and free movement in all directions on the OT floor

**Accessories**

12. Silicone patient plate (pediatric and adult) – 2 each
13. Monopolar forceps with hand control with accessories
14. Bipolar forceps( straight long, straight short, bayonet) with accessories
15. Double paddle foot switch with cable
16. Bipolar foot switch
17. Power cord to connect to diathermy machine (if not in build) able to fit in Indian type of electricity socket

**Technical specification**

**Monopolar cut**

(HF power adjustment with Up/down Soft keys, from 1 to 60-100 Watts in increment of 1 watt)

| | |
|---|---|
| HF output | 175-250 W at 100-700 ohms |
| Frequency of HF voltage | 350 KHz +/- 50 KHz |

**Monopolar coagulation**

(HF power adjustment with Up/down Soft keys, from 1 to 60-100 Watts in increment of 1 watt)

**Monopolar Soft Coagulation**

| | |
|---|---|
| Frequency of HF voltage | 350 KHz +/- 50 KHz |
| HF output | 100 W at 100-200 ohms |

**Monopolar Spray Coagulation**

| | |
|---|---|
| Frequency of HF voltage | 500 KHz +/- 50 KHz |
| HF output | 100-120 W at 300 ohms |

**Monopolar Forced Coagulation**

| | |
|---|---|
| Frequency of HF voltage | 500 KHz +/- 50 KHz |
| HF output | 100-150 W at 300 ohms |

**Bipolar Coagulation**

**(**HF power adjustment with Up/down soft keys, from 1 to 60-100 Watts in increment of 1 Watt)

| | |
|---|---|
| Frequency of HF voltage | 350 KHz +/- 50 KHz |
| HF output | 70-100 W at 100-200 ohms |
| Activation of HF output power | pedal and auto start (either both or only pedal) |
| Auto start delay (if auto start) | 1, 3, 5 sec |

**Bipolar Cut**

**(**HF power adjustment with Up/down soft keys, from 1 to 60-100 Watts in increment of 1 Watt)

| | |
|---|---|
| HF output | 70-100 W at 100-500 ohms |

**Safety measures**

1. Time limit LED glows if power delivery activated for more than 10 seconds. Power shuts OFF after total 15 sec. of continuous operation.
2. Auto. Patient plate detection, audio-visual alarm activation on patient plate disconnection
3. Monopolar output leakage current- Maximum 0.01 mA
4. Bipolar output leakage current- Maximum 0.01 mA

**Mechanical Details**
Weight- 12 Kg. Maximum

**Environmental Condition**
Operating Temperature $0^0$ to $40^0$C

**Other specification**
Unit should operate on 220 +/- 10% V AC, 50 Hz

## Item No. 19

## Laparoscopic Surgery set

The set for Laparoscopic surgery should have individual components as given below, which should be quoted individually. They could be offered bundled in a comprehensive system or separately for each individual group which should be adaptable with all major international brands.

**A. SPECIFICATIONS OF CAMERA CONTROL UNIT & CAMERA**

1. **High definition system** with completely end to end digital technology with digital processing for all functions like shading correction, aperture correction, colorimetric correction, glare reduction, contrast enhancement, black level, knee function and pixel correction.
2. Colour system: PAL, NTSC
3. Picture elements: 752(V) x 582(H) pixels per chip (PAL), 768(V) x 494(H) pixels per chip (NTSC) approximately
4. Progressive scan
5. Minimum sensitivity to light of 3 lux
6. Possibility of distant positioning of telescope for clear, unobstructed and enlarged view.
7. High quality image without overexposure even when very close to object
8. Resolution: Horizontal – 750 or more lines. Vertical – 350 or more lines
9. Picture elements: Vertical -750, Horizontal – 580 pixels per chip minimum
10. AGC approximately + 18dB
11. Should adapt automatically to all makes of endoscopes
12. Cable angle should provide tactile and visual orientation
13. Lens: f = 22.5 mm or better with C-mount
14. Programmable control for VCR, video control
15. Keyboard input for character generator
16. Manual and automatic exposure control
17. Automatic white balance with memory function
18. Should have white balancing function on camera console as well as on camera head
19. Camera head including endofocus objective should be lightweight, should have programmable controls for recording and white balancing among other functions
20. Should meet international standards like European and American Standards
21. Programmable user settings

**B. SPECIFICATIONS OF TELESCOPES**

1. 10 & 5 mm diameter, approximately 30 cm long
2. Straight forward, zero & 30 degree angle of view

3. Low risk of object burn
4. Should attach to all standard cameras
5. Colour coded for identification
6. Autoclavable

**C. SPECIFICATIONS OF INSUFFLATOR**

1. Fully automatic, electronically controlled gas fill.
2. Maximum Flow rate upto 20 litres per minute.
3. Optical and acoustic warning signals in case of malfunction or excessive pressure
4. Connectible to medical gas pipeline
5. Control by touch keys on front panel
6. Clear and adjacent display of actual and preset flow rate, actual and preset pressure, gas consumed
7. Optional facility for preheating of gas to body temperature
8. Facility for easy evacuation of smoke and mist
9. Memory for retention of previous pressure settings
10. Should include pin-index connection to small/big gas cylinder with regulator, high pressure hose, mains cord, silicone tubing set, universal wrench and gas filter
11. High standard for patient safety

**D. SPECIFICATIONS OF SUCTION IRRIGATION SYSTEM**

1. Pump for irrigation and suction
2. Touch keys for control
3. Foot control
4. Accessories should include silicone tubings, bacterial filter and bottles with cap

**E. SPECIFICATIONS OF COLD LIGHT FOUNTAIN**

1. Xenon 300 watts
2. Colour temperature corresponding to brightness of daylight
3. Manual and automatic adjustment of light intensity
4. Lamp life 500 hrs or more
5. Display of lamp life
6. Standby mode by switch on front panel and or camera head
7. Emergency halogen lamp with life of 500 hrs or more
8. Display of emergency lamp use if switched on
9. Memory of last settings when switched off
10. Long fluid and fibre-optic light cable

**F. SPECIFICATIONS OF VIDEO MONITOR**

1. Two Medical grade flat monitor of approx 36 cm size.
2. Colour system: PAL & NTSC with S_VHS and RGB connectivity
3. Horizontal resolution of 500 or more lines
4. Video input: Composite to BNC socket, Y/C to S-VHS socket
5. Control of monitor functions by display set up menu
6. Built in speakers
7. Should meet international standards

**G. SPECIFICATIONS OF IMAGE MANAGEMENT SYSTEM**

1. Integrated into the system or provided separately though PC
2. Adequate storage capacity for recording of still as well as video images

**H. SPECIFICATIONS OF VIDEO TROLLEY**

1. Stainless steel
2. Should accommodate all equipment with electrical connection on the trolley
3. Should have sufficient space to accommodate all the major equipment

**I. SPECIFICATIONS OF HAND INSTRUMENTS**

a. **TROCAR SLEEVES** size 11 mm , 5 mm and 3 mm – (3 each) , reusable, modular, with
   i. Automatic and manual operated magnet ball valve.
   ii. Exchangeable guide tube

iii. Dismantlable parts
iv. Maintenance free
v. Autoclavable

b. Trocar for 11mm and 5 mm and 3 mm trocar sleeves, protective, reusable, dismantlable (3 each)
c. Pyramidal trocars, sizes 11 mm, 5 mm and 3mm, reusable (3 each)
d. Maryland Dissector- 5mm and 3mm rotatable, dismantlable, snapshot connection type (3each)
e. Fenestrated grasper- 5 mm and 3mm rotatable, dismantlable, snapshot connection type (2 each)
f. Bowel grasper-5 mm and 3 mm (2 each)
g. Fundus grasper-5 mm, with automatic rotation lock while activated, rotatable, dismantlable, snapshot connection type (2)
h. Hook scissors- 5 mm and 3mm rotatable, dismantlable, snapshot connection type (2 each)
i. Curved scissors - 5 mm and 3mm rotatable, dismantlable, snapshot connection type (2 each)
j. Toothed grasper -5 mm and 3 mm rotatable, dismantlable, snapshot connection type (2)
k. Claw forceps, 10 mm, rotatable, dismantlable, snapshot connection type
l. Fan retractor, 5 mm
m. Babcock forceps- 5 mm and 3 mm rotatable, dismantlable, snapshot connection type (2)
n. Clip applicator for small and medium large clips 10 mm and 5 mm rotatable with flushing channel(1)
o. Clip applicator for large clips, 10 mm, rotatable with flushing channel(1)
p. Dissecting hook -5 mm and 3 mm- 2 each
q. Dissecting spatula- 5 mm and 3mm
r. Suction irrigation cannula, 5 mm & 10 mm, trumpet type- 1 each
s. Aspiration needle, 5 mm- 1 each
t. Needle holder, straight, 5 mm, 3mm- 1 each
u. Needle holder, left curved and right curved- (1 each)
v. Veres needle, 120 mm (2)
w. Reducers, 11 to 5 mm (3) and 5 to 3 mm (2) with silicone latch

**J. ANCILIARY EQUIPMENT**

1. Constant Voltage Transformer: for Laparoscopic equipment
2. Carbon dioxide gas cylinder (big size) (2 nos) with high pressure tube, connector to insufflator
3. Carbon dioxide regulator for big cylinder

## Item No. 20

## Anaesthesia Work Station

Equipment Specifications for Anesthesia Workstation
**1.** Anaesthesia Workstation is used for delivering anaesthesia agents to the patients during surgery. The complete unit also monitors the vital signs and ventilates the patient

**2.** a) Anaesthesia Workstation complete with Anaesthesia gas delivery system.;Circle absorber system.;Precision vaporiser for halothane,isoflurane and Sevoflurane ;Anaesthesia ventilator. Monitoring system to monitor Anaesthetic gases,ECG, EtCO2, Pulse Oximeter and airway pressure,NIBP, IBP (No as required) , rectal/&skin temperature.
b) Essential accessories to make the system complete

**2.1** Demostration of the equipment is a must.

**3. Technical Specifications**
**3.1** Flow management
1. Should be Compact, ergonomic & easy to use
2. Machine should provide electronic gas mixing.

3. Multi-color TFT display of at least 12" size, with virtual flow meters for O2, N2O or Air
4. Dual flow sensing capability at inhalation and exhalation ports.
5. Should have back-up O2 control which provides an independent fresh gas source and flow meter Control in case of electronic failure.
6. Gas regulators shall be of modular design/ graphic display
7. One no. yoke each for Oxygen & Nitrous Oxide. Separate Pipeline inlet for Oxygen , Nitrous Oxide and Air
8. Hypoxic Guard to ensure minimum 25% O2 across all O2-N2O mixtures and Oxygen Failure Warning

**3.2** Breathing system

2. Latex free fully autoclavable.
3. Flow sensing capability at inhalation and exhalation ports, sensor connections shall be internal to help prevent disconnect.
4. Sensor should not require daily maintenance.
5. Bag to vent switch shall be bi-stable and automatically begins mechanical\ ventilation in the ventilator position.
6. Adjustable pressure limiting valve shall be flow and pressure compensated.

**3.3** Vaporizers

1. New generation Vaporizer must be isolated from the gas flow in the off position and prevent the simultaneous activation of more than one vaporizer.
2. Vaporizer should mount to a Selectatec manifold of 2 vaporizers, which allows easy exchange between agents. Temperature, pressure and flow compensated vaporizers and Maintenance free - for Isoflurane,Halothane, and Sevoflurane

**3.4** Ventilation

1. The workstation should have integrated Anesthesia Ventilator system.
2. Ventilator should have Volume Control and Pressure Controlled and SIMV modes.
3. Ventilator should have a tidal volume compensation capability to adjust for losses due to compression, compliance and leaks; and compensation for fresh gas flow.
4. The workstation should be capable of delivery of low flow anesthesia.
5. Ventilator should be capable of atleast 120-150 L/min peak flow to facilitate rapid movement through physiologic "dead space" in the Pressure Control mode

**3.5 1.** Anesthesia Monitoring Specifications:

a. Monitoring of vital parameters:ECG,NIBP,SPO2 and two Invasive Blood Pressure.
b. Twin temperature measurement with skin and rectal probes- Two sets with each monitor
c. Automatic identification and measurement of anesthetic agents, EtCO2, O2 and N2O and MAC value. FiO2 measurement
d. Depth of Anesthesia Monitoring module - one per monitor with 50 sensors with each monitor
e. Neuromuscular Transmission Monitoring with all accessories. One set with each monitor
f. Cardiac Output measurement facility by thermo dilution technology with all accessories- one set for three monitors.
g. 24hrs of graphical and numerical trending
h. Should have Hemodynamic, Oxygenation and Ventilation calculation package
i. Should include inbuilt Anaesthesia record keeping software facility in all OT monitor to document anesthesia event using standardized menu based entries.
j. Facility to store snapshots during critical events for waveform review at a later stage
k. Audio visual and graded alarming system

**2.** Display of Ventilator:

a. Tidal volume (VT))
b. Inspiratory/expiratory ratio (I:E)
c. Inspiratory pressure (Pinspired)
d. Pressure limit (Plimit)
e. Positive End Expiratory Pressure (PEEP)

**3.6** Centralised Monitoring and Networking:

1) Central Monitor with Ethernet Networking of all the OT Monitors withLaser Printer and with client computer in office of Doctor Incharge , for browsing real time waveforms, graphical & numerical trend upto 24 hrs, from each OT Monitor.
2) Web Browsing feature for browsing near real time waveforms and graphical & numerical trend upto 24hrs remotely through telephone dial in facility.

**3.7** Automatic Recording System

**4. System Configuration Accessories, spares and consumables**

**4.1** Anaesthesia Gas Delivery system -01
**4.2** Circle absorber -01
**4.3** Ventilator -01
**4.4** Monitor -01
**4.5** Vaporiser Halothane -01
**4.6** Vaporiser Sevoflurane -01
**4.7** Vaporiser Isoflurane -01
**4.8** Adult and Paediatric autoclavable silicone breathing circuits -02 ea
**4.9** Reusable IBP Transducer -04
**4.10** Disposable domes-100
**4.11** Temp probe Skin reusable- 02
**4.12** Temp probe Rectal Reusable-02
**4.13** Accessories Anesthetic gases-01 set
**4.14** Depth of Anesthesia Sensors-50
**4.15** Accessories for Cardiac Output module- 01 set
**4.16** Accessories for neuromuscular transmission monitor- 01 set
**4.17** Standard accessories to make all parameters working- 01 set
**4.18** Disposable Adult & Paediatric circuits- 50 ea.
**4.19** HME filters.- 50
**4.20** Vital Parametrer Accessories-01 Set

**5. Environmental factors**

**5.1** The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
**5.2** The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
**5.3** Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
**5.4** Safe disposal system of waste anaesthetic gases should be either in place or should be recommended along with the bid if not available. Supplier will be held responsible if this is not ensured at the time of installation.

**6. Power Supply**

**6.1** Power input to be 220-240VAC, 50Hz,/440 V 3 Phase as appropriate fitted with Indian plug
**6.2** Resettable over current breaker shall be fitted for protection
**6.3** Suitable Servo controlled Stabilizer/CVT
**6.4** UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system

**7. Standards, Safety and Training**

**7.1** Should be FDA or CE approved product
**7.2** Electrical safety conforms to standards for electrical safety IEC-60601 /IS-13450
**7.3** Manufacturer should be ISO certified for quality standards.
**7.4** Certified to be compliant with IEC 60601-2-13-Medical Electrical equipment part 213: Particular requirements for the safety of Anaesthesia Workstations

**7.5** Should have local service facility .The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
**7.6** All imported components like anaesthesia machine, monitor and ventilator should be from one manufacturer/principal.
**7.7** Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.
**7.8** Comprehensive warranty for 2 years and provision of CMC for next 5years.

**8. Documentation**
**8.1** User Manual in English
**8.2** Service manual in English
**8.3** List of important spare parts and accessories with their part number and costing
**8.4** Certificate of Calibration and inspection from the factory
**8.5** Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
**8.6** List of Equipment available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
**8.7** Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/data sheet. Any point ,if not substantiated with authenticated catalogue/manual, will not be considered.
**8.8** Must submit user list and performance report within last 5 years from major hospitals.

## Item No. 21

## Plasma Sterilizer

Equipment Specifications for Plasma Sterilizer

**1. Description of Function**
**1.1** Plasma sterilization includes exposing an article to be sterilized to a plasma generated from a gas mixture. The exposure of the article to the plasma is carried out at a pressure of from 0.1 to 10 torr and a chamber temperature of less than 63 degree C for a time period sufficient to effect sterilization. The
apparatus for plasma sterilization of articles includes a plasma generator and a sterilizing chamber.

**2. Operational Requirements**
**2.1** Sterilization of Operation Theatre instruments using state-of-art Hydrogen peroxide Gas Plasma Technology and cost effective

**3. Technical Specifications**
3.1 The temperature of sterilization must be in the range of 30-60o C and of low-moisture sterilization process
**3.2** The process should be rapid enough to provide high throughput with the cycle time of 50-75 minutes
**3.3** The cycle time to processing should be programmable to best match the Operation Theatre instruments and load configuration
**3.4** The size of the sterilizer should be 160 – 180 liter with a usable volume of 100-120 liters.
**3.5** There should be no toxic residuals with primary by-products being water vapour and oxygen & it should be safe for patient, staff and environment.

**4. System Configuration Accessories, spares and consumables**
**4.1** System as specified-

**5. Environmental factors**

**5.1** Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
**5.2** The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%
**5.3** The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

**6. Power Supply**
**6.1** Power input to be 220-240V AC, 50Hz fitted with Indian plug
**6.2** Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications. (Input 160-260 V and output 220-240 V and 50 Hz)
**6.3** Suitable UPS with maintenance free batteries for minimum one-hour back up should be supplied with the system.

**7. Standards, Safety and Training**
**7.1** Certified to be in compliance with ISO/EN 14937. -Standards for sterilization equipment.
**7.2** Should be FDA, CE, UL or BIS approved product
**7.3** Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements
**7.4** Manufacturer/Supplier should have ISO certification for quality standards.

**8. Documentation**
**8.1** User Manual in English
**8.2** Service manual in English
**8.3** Certificate of calibration and inspection.
**8.4** List of Equipment available for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.
**8.5** List of important spare parts and accessories with their part number and costing.
**8.6** Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
**8.7** The supplier must furnish satisfactory service report for about 3 years or more from at least 3 users preferably Govt. Institutions

## Item No. 22

## ULTRASONIC ENERGY CLEANER (High load)

The compact cabinet type automatic ultrasonic cleaning system console with two chambers for cleaning & rinsing /Drying for effective cleaning of surgical instruments and rigid lumens of the surgical scopes prior to sterilization.

- Automatically controlled St. Steel cabinet type ULTRASONIC cleaner with four lockable castors.
- Having automatic opening lids and safe instrument loading trays in the dual tanks of not less than 40 Litter capacity
- Should be able to hold min. 10kg weight of the instruments
- To achieve high degree of fast and efficient cleaning, the ultrasonic waves generators in the wash tank should provide min. 750 Watts of sonic power and transducers should not be operating at less than 100kHz
- Should also be possible to flush ultrasonically atleast five Rigid Lumens of surgical scopes.
- Should have facility to inject instrument lubrication spray automatically during rinse.
- Should have inlet provision for Hot & Cold water and compressed air (to aid drying).
- Automatic cycling and indicating completion visually and audibly along with automatic lid opening at the end of timed cycle.
- Lid should be electrically operable with foot actuated switch.
- Cycle to stop on accidental lifting of the lid

- Provide four trays with tray hooks to hold instruments and two port flushing kit for rigid lumens with each cabinet
  Electrical Service – 220 VAC , 50 Hz
  Standard: Should meet applicable UL / CSA /CE standards
  (Provide six month supply of suitable Instrument Lubricant (4packs) and
  Enzyme based chemical cleaner (8 packs) with each supply.)

## Item No. 23

## Paediatric Cystoscope And Resectoscope

**Technical Specifications**

The compact fibre cysto-urethroscope (rigid)for neonates,infants & children
should have
Rigid fibre cysto-urethroscope 6/7.5Fr, 0 degree angle of view and 4 Fr working
channel with working length of 140mm – 1 no
Bugby electrode 2.4 fr., 255mm – 5 nos
High-frequency cable 3 mtr long – 2 nos
The Pediatric Resectoscope for neonates and infants should have
Panoview telescope 1.9 mm dia., 0 degree angle of view and autoclavable – 1 no
Resectoscope sheath 9 Fr oblique and insulated distal tips with fixed irrigation tap including obturator colour code white – 1 no
Working element passive cutting action – 1 no
High Frequency connecting cable 3 meter long – 2 nos
Cutting electrode – 5 nos
Coagulation electrodes – 5 nos
Hook electrode – 10 nos
Adaptor with instrument port capacity 3 Fr – 1 no
Panoview telescope 2.7 mm dia., 30 deg.angle of view with fixed eye piece autoclavable – 1 no
Cystoscope sheath 9.5Fr. including obturator colour code yellow with 4 Fr
capacity working channel – 1 no
Rigid Grasping forceps "ENLANGEN"3 Fr for removing stents with working length 260mm – 1 no
Compact universal operating cystourethroscope for infant and children should have compact universal operating cystourethroscope (rigid fibre cystourethroscope),
8/9.8Fr, 12 degree angle of view having working channel 5Fr and working length
150mm – 1no
Rigid Grasping forceps "ENLANGEN"5Fr for removing stents with working length 260mm – 1no
Coagulating button electrode, 5 Fr – 2 nos
Bugby hook electrode 4Fr – 2 nos

## Item No. 24

## Ultrasonic Cutting and Coagulating Device

1. Utilizes ultrasonic energy to enable hemostatic cutting and/or coagulation of tissue
2. The systems includes an Ultrasonic Generator, a foot switch and a hand piece and after mentioned accessories.
3. Ultrasonic generator with fixed frequency of 55.5kHz( output)
4. It should have 5mm, and 10mm instruments/probes/shears for laparoscopy.
5. It should have capacity of 5mm vessel sealing with lap and open shears.
6. It should have 3 different audible tone settings possible.
7. The probe of the Coagulating shear should be 360° rotatable and capable of working in three modes- Flat, Blunt and Sharp mode.

8. It should have option of hand activation with bilateral MIN and MAX switches
9. It should have a provision for connecting 2 footswitches for two surgeons to work simultaneously.
10.It should have self-diagnostic mode to detect any problem with generator, footswitch, transducer or instruments.
11.It should have an audible indicator for active shear/probe/instrument
12.It should have a warning system for a worn out probe/shear/instrument with error codes.
13.It should have a maximum of 5 power level settings with power level display of both MIN & MAX
14.Frequency of vibration should be same for both open and lap probes/shears/instruments
15.It has a vibration range of 50-110 microns(micro meters, µm)
16.The system can be put in standby mode for better safety.
17.It should not be combined with an Electrosurgical unit
18.It should be functional for both Laparoscopic and Open surgeries.

**Accessories**

(a) Wrench
(b) Test Tip
(c) Transducer for shears
(d) Transducer for fine dissecting probe
(e) Foot switch with cable
(f) Hand piece

**Open surgical instruments**:

(a) Coagulating Shears-Open
(b) Coagulating Shears-Open Curved Mode
(c) Fine dissection probe for Thyroid and auxiliary dissection.

**Laparoscopic Instruments** (**a**) 5mm and 10 mm laparoscopic dissecting hook, laparoscopic shear, laparoscopic ball coagulator – 36cm and 45 cm.

## Item No. 25

## Digital X-Ray Unit (1000 mA)

The unit should be completely integrated system (integrated X ray generator and image acquisition control console) having the following specifications:-

**1. Generator**

- 1000 MA unit with microprocessor controlled high frequency X-Ray generator with power output of 80 KW
- Specify KV and mA range
- Specify exposure time range

For trauma patients the generator should have minimum exposure time.
There should be provision for automatic exposure control.

**2. X-Ray Tube**

- Ceiling suspended
- Dual focus tube
- Mention size of each focus
- Tube loading should be at least 30 KW for small and at least 80 KW for large focus
- Motorized movement of ceiling suspended tubes
- Mention range of tube movements in vertical, longitudinal and horizontal planes
- Electromagnetic locks collision protection sensor
- Field size programming should be possible

**3. Horizontal Bucky Table**
- Adjustable height floating top compact bucky table with digital flat panel detector.
- Mention range of vertical, horizontal and longitudinal movements of the table.
- Foot switches for – adjusting height, longitudinal/side to side movements, locking, light adjustment.
- Removable grid.
- Automatic exposure control should be available.

**4. Vertical Bucky**
- Counter balanced adjustable height vertical Bucky with digital flat panel detector.
- Detector movement should be synchronized with movement of the X-ray tube.
- Vertical detector system should be tilt table (-150 to + 900 ) and should travel from 1' to 6 ½' above floor level.
- Automatic exposure control.
- Patient display.

**5. Detector System**
- Digital flat panel detector system with detector integrated into the Bucky table and wall stand.
- Minimum size of detector must be 14"x17"
- Image matrix size 3k y 3k pixels
- Pixels size to be mentioned
- Image resolution
- Specify picture elements
- Tube assembly movement to be automatically synchronized with the detector movement.
- Should allow centered/de-centered collimation
- Specify refresh cycle (time for second exposure)

**6. Operating Station**
- Should have a high resolution monitor minimum **19" size (TFT/LCD)** with minimum 1024x1024 or more display matrix and antireflective front screen.
- Operating console should have facility for patient identity entry, viewing and processing images, documentation
- Specify time for the image to appear on screen after exposure - Next exposure should be possible while processing is in progress on the operating station

**7. Image Viewing and Reporting Station and Documentation**
- Should have high resolution, minimum 19"size (TFT/LCD) monitor.
- Image acquisition matrix should be minimum of 3K x 3K.
- Image display matrix should be of high resolution, minimum of 1.5 Kx 1.5 K.
- High luminescence display for diagnostic image viewing.
- Post acquisition image processing, viewing, reprocessing, hard copy documentation and onward transmission should be possible.
- Should be connected to a Dry chemistry Laser Camera of at least 600 DPI for documentation. The camera should accept all size films up to 14"x17" size.
- Long term storage facility.

**8. Image storage and Transmission**
- Hard disc storage capacity should be minimum of 3000 images
- The systems should support storage of images on compact discs/DVD
- The system should be DICOM 3.0 (or higher version) ready (like send, receive, print, record on CD/DVD, acknowledge etc.) for connectivity to any network, computer/PC etc. in DICOM format.
- Easy integration and networking should be possible with any other existing/future networking including other modalities, HIS and RIS and PACS

**9. Accessories**
- Voltage stabilizer for complete system
- UPS for the computer with 30 minute backup
- Dry chemistry laser camera with at least 600 DPI resolution to take all size of films up to 14”x17” size
- Image viewing and reporting station
- Minimum necessary furniture and fire extinguisher system.

**9. a. - Image composition accessory should be available to allow acquistion of whole spine & extremity images.**
**9. b. - Any other accessory useful for trauma work should be mentioned.**
**9. c. - Optional items**
**i) Digital Tomography**

**10. Installation**
- The cost of alteration and preparation in a specified built in area on turnkey basis which will include civil, electrical and air conditioning and maintenance of air conditioning is to be borne by the firm.
- This work should be done in consultation with the Department of Radio-diagnosis and Engineering Section of AIIMS.
- Power supply to be clarified.

**11. Warranty/After Sale Service**
- Five year comprehensive onsite warranty of entire system (Spares and labour) including X-ray tube and all accessories and civil, electrical and air conditioning works. This will be followed by 5 years comprehensive AMC.
- 95% uptime guarantee should be given. In case down time exceeds 5%, penalty in the form of extended warrantee, double the number of days for which the equipment goes out of service, will be applied

## Turnkey: X-ray Installation 1000 mA

Total covered area should be approximate 1500 Sq. feet or as per actual drawing attached **(For ranking purpose 1500 Sq ft will be considered).**

**To be provided by the consignee**

1. Bare Walls.
2. Power Supply - Till the room to be provided. However rates per meter of cabling and other accessories needs to be quoted as optional item in case this job is assigned to the bidders.
3. AIR- CONDITIONING - Ducts to be provided till room. However bidder to be quote as optional item for split a/c intimates tonnage if this facility has to be provided by the bidder.
1. Payment to be made as per actual on pro-data basis.
2. The optional items will not be considered for ranking purposes.

**Turn Key to be provided by the Bidder**

1. Rate per sq. ft for lead lining to be paid in the event of the wall thickness does not meet the AERB requirements (For ranking purpose 1500Sq ft will be considered).
2. Flooring
3. False ceiling
4. Vitreous Tiles on the walls however in case the lead linings are provided, the cost may be adjusted accordingly
5. All trenches and railings wherever required
6. Any other necessary work required for satisfactory working of the equipment.

**Schedule of Finishes-**

1. Total covered area should be approximate 1500 Sq. feet or as per actual drawing attached.
2. The thickness of the walls should be according to AERB/BARC norms.
3. Should provide lead lining were ever required. (Doors, Etc.) As per AERB/BARC norms.

| Sl. No. | Room | Flooring | Skirting/Dado | Walls | Ceiling |
|---|---|---|---|---|---|
| 1. | Reception, Waiting, Patient Preparation | 300x300x8.5 mm thick mirror stone tiles. | 100mm high tile skirting to match floor. | Cement plaster & Emulsion paint | Perforated Al. Panel or as required False Ceiling with acoustic lining & Al or as required. suspension |
| 2. | Examination Room | 300x300x2.0 mm thick vinyl tiles | 100mm high hard wood skirting | Pre-laminated particle board wall panelling | -Do- |
| 3. | Control, Room & Corridor | 300x300x8.5 mm thick granite | 100 mm high granite tiles skirting | Cement plaster and plastic emulsion paint | -Do- |
| 4. | Electrical room | 52mm thick cement concrete flooring with hardener | 100 mm high cement plaster skirting | Cement plaster and dry distemper paint | Plaster and dry distemper |
| 5. | Toilet and pantry | 300x300x8.5 mm thick ceramic tiles (polished on counter top) | 100x200x5 mm thick glazed tiles up to door height from floor level. | Plaster & oil bound distemper on walls above false ceiling | Gypsum board false ceiling with oil bound distemper paint |

**AIR- CONDITIONING**

1. The consignee will provide with a/c Ducts till room . However rates per meter of cabling and other accessories needs to be quoted as optional item in case this job is assigned to the bidder
2. Should provide split a/c or equivalent with wireless remote control separately to Gantry room, Operating and Study consoles, reception etc..
3. The capacity of the a/c should be sufficient to maintain the require temperature.
4. It is the responsibility of the bidder to provide all the electrical accessories.

**Schedule of furniture:**

Following furniture should be provided:

| AREA | DESCRIPTION | QTY. |
|---|---|---|
| Waiting & Reception | : Reception desk in block board construction with granite top | 1 No. |
| | : Storage cupboard | 1 No. |
| | : Reception chair | 1 Nos. |
| | : PVC moulded chairs on common steel stand in group | 12 Seats |
| | : Corner Table | 4 Nos. |

| | | | |
|---|---|---|---|
| Control Room | : | Low backed swing chairs on castors with armrests | 3 Nos. |
| | : | Film Viewer (6 films) | 1 No. |
| Gantry Room | : | Drug trolley on castors | 1 No. |
| | : | Lead Aprons (Light weight) | 4 Nos. |
| Patient preparation | : | Patients couch | 1 No. |
| | : | Drug trolley | 1 No. |
| | : | Examination Stool | 1 No. |

All the furniture should be reputed make.

**It is the responsibility of the bidders to visit the consignee site for assessing site requirements and readiness.**

## Item No. 26

## Clinical CE/IVD Flow Cytometer

1. Should have simultaneous minimum 06 fluorescent (6 color) parameters analysis plus forward & side scatter. For each parameter the flow cytometer should be capable of measuring area, height and width.
2. Should be equipped 2 solid state Laser ( Blue 488nm & Red 633-640 nm )
3. Lasers should be fix/factory aligned without the need for onsite alignment.
4. Optical filters should be easily changeable by user without having to call service engineers
5. The flow cytometer should have high quality quartz flow cell.
6. Must have Compensation capability on-line as well as post-acquisition, between all fluorescence channels manually and through auto compensation.
7. The equipment should have digital signal processing with dynamic range of at least 18 bit data acquisition or more in order to get the clear resolution of populations
8. Events per second: 10,000 or more
9. Sample carry over rate must be $\leq$0.1%.
10. Must have Bar Code reader ( inbuilt or external ) for easy sample tracking, ID etc. and for complete automation
11. The Instrument should have bio-hazard containment facility for probe washing.
12. System should have on-site facility for 8 colour upgrade for future parameter extension
13. Software: PC controlled Windows based software (System should come with all required acquisition/analysis software) with PC Hardware with compatible configuration with Coloured LCD Monitor.
14. System should be IVD for clinical patient sample use & reporting purpose.
15. Starter Kit for 200Tests (Including Sheath Fluid, Cleaning reagents, Tubes, Calibrators & controls)
16. Clinical Antibodies for 100 Tests with below panel :-
17. Fluorochrome labelled Antibodies for Acute leukemias, chronic lymphoproliferative disorders, Multiple Myeloma CD 45, CD34, Tdt, HLADR, CD19, CD 22, CD 10, CD 79a, cyto CD3, CD 2, CD 5, CD 7,

CD 4, CD 8, CD123, antiMPO, CD 13, CD 33, CD 117, CD 64, CD 14, cyto CD41, cyto CD 61, cyto CD 42, CD38, CD 138, CD23, CD 20, SmIg, FMC7, CD 79b, CD 5,ZAP70,CD38,10, CD 11c, CD 25, CD 103

18. Warranty for atleast two years ( including on laser) : ( CMC for five years Should be quoted post warranty, which should include complete equipment parts, computer hardware and software, printer, A.C., UPS including the batteries )

19. Quoted company should have direct Service/Application Support structure in India for installation, basic & advance training (should have their application support lab in India). Also quote service support structure & performance certificate & user lists from other customers in India.

**GENERAL TECHNICAL SPECIFICATIONS**

# GENERAL POINTS:

1. Warranty:

   a) Two years Comprehensive Warranty as per Conditions of Contract of the TE document for complete equipment (including Batteries for UPS, other vacuumatic parts wherever applicable) except in case of CT, MRI and 1000m A X-ray machine wherein the warranty period will be 5 years from the date of installation, commissioning and Turnkey Work from the date of satisfactory installation, commissioning, trial run & handing over of equipment to Hospital/Institution/Medical College.
   b) 98% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.
   c) All software updates should be provided free of cost during Warranty period.

2. After Sales Service:

   After sales service centre should be available at the city of Hospital/Institution/Medical College on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 8 hrs. The service should be provided directly by Tenderer/Indian Agent. Undertaking by the Principals that the spares for the equipment shall be available for at least 10 years from the date of supply.

3. Training:

   On Site training to Doctors/ Technicians/ staff is to be provided by Principal/ Indian Agents (if they have the requisite know-how) for operation and maintenance of the equipment to the satisfaction of the consignee.

4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Turnkey:

   a) The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years on yearly basis for complete equipment (including Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, but at least once in six months during the CMC period
   b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
   c) Cost of CMC will be added for Ranking/Evaluation purpose. The same will be taken at Net Present Value with a 10% discounting factor each year.
   d) The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by end user on receipt of bank guarantee for 2.5 % of the cost of the equipment as per Section XV valid till 2 months after expiry of entire CMC period.
   e) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
   f) During CMC period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
   g) All software updates should be provided free of cost during CMC.
   h) Failure of the above [4. e) to 4. g)] by the supplier, may lead to the forfeiture of the Bank Guarantee for Annual CMC.
   i) The payment of CMC will be made as stipulated in GCC Clause 21.

***Turnkey:***

Turnkey is indicated in the technical specification of the respective items, wherever required. The Tenderer shall examine the existing site where the equipment is to be installed, in consultation with HOD of Hospital/Institution/Medical College concerned. Turnkey details of each Hospital/Institution/Medical College are given at the end of Technical Specification. The Tenderer to quote prices indicating break-up of prices of the Machine and Turnkey Job of each Hospital/Institution/Medical College. The Turnkey costs may be quoted in Indian Rupee will be added for Ranking Purpose.

The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

The Turnkey Work should completely comply with AERB requirement, if any.

# Section – VIII
# Quality Control Requirements

(Proforma for equipment and quality control employed by the manufacturer(s)

Tender Reference No.

Date of opening

Time

Name and address of the Tenderer:

Note: All the following details shall relate to the manufacturer(s) for the goods quoted for.

01 Name of the manufacturer
- a. full postal address
- b. full address of the premises
- c. telegraphic address
- d. telex number
- e. telephone number
- f. fax number

02 Plant and machinery details

03 Manufacturing process details

04 Monthly (single shift) production capacity of goods quoted for
- a. normal
- b. maximum

05 Total annual turn-over (value in Rupees)

06 Quality control arrangement details
- a. for incoming materials and bought-out components
- b. for process control
- c. for final product evaluation

07 Test certificate held
- a . type test
- b . BIS/ISO certification
- c . any other

08 Details of staff
- a. technical
- b skilled
- c unskilled

**Signature and seal of the Tenderer**

# Section – IX
# Qualification Criteria

1. The tenderer must be a manufacturer. In case the manufacturer does not quote directly, they may authorise their authorized agent as per proforma of Manufacturer authorization form as given in the tender enquiry document to quote and enter into a contractual obligation.

2. (a) The Manufacturer should have supplied and installed in last **Five** years from the date of Tender Opening, at least 50% of the quoted quantity of the similar equipment meeting major parameters of technical specification which is functioning satisfactorily. (For equipments which are consumable in nature, as identified in the list of requirement, proof of delivery/acceptance by consignee/purchaser shall also be considered acceptable)

2. (b) The Tenderers quoting as authorized representative of the manufacturer meeting the above criteria 2 (a) should have executed at least one contract in the last five years from the date of tender opening of similar equipment meeting major parameters of technical specification which is functioning satisfactorily, anywhere in India of the same manufacturer

**Note:**

1. The tenderer shall give an affidavit as under:

   **"We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchaser in addition to forfeiture of the earnest money."**

2. In support of 2 (a) & 2 (b), the Tenderer shall furnish Performance statement in the enclosed Proforma 'A'.

   The manufacturer ( Tenderer) / Indian Agent shall furnish Satisfactory Performance Certificate in respect of above, duly translated in English and duly notarized in the country of origin, alongwith the tender.

3. The Tenderer shall furnish a brief write-up, packed with adequate data explaining and establishing his available capacity/capability (both technical and financial) to perform the Contract (if awarded) within the stipulated time period, after meeting all its current/present commitments. The Tenderer shall also furnish details of Equipment and Quality Control in the enclosed Section VIII.

4. Notwithstanding anything stated above, the Purchaser reserves the right to assess the Tenderer's capability and capacity to perform the contract satisfactorily before deciding on award of Contract, should circumstances warrant such an assessment in the overall interest of the Purchaser.

5. The Purchaser reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser for technical acceptability as per the tender specifications, before the opening of the Price Tender.

**PROFORMA 'A'**

# PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years)

Tender Reference No. : _____

Date of opening : _____

Time : _____

Name and address of the Tenderer : _____

Name and address of the manufacturer : _____

| Order placed by (full address of Purchaser/ Consignee) | Order number and date | Description and quantity of ordered goods and services | Value of order (Rs.) | Date of completion of Contract | | Remarks indicating reasons for delay if any | Have the goods been functioning Satisfactorily (attach documentary proof)** |
|---|---|---|---|---|---|---|---|
| | | | | As per contract | Actual | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | | | | | | |

We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchser in addition to forfeiture of the earnest money.

**Signature and seal of the Tenderer**

**** The documentary proof will be a certificate from the consignee/end user with cross-reference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished.**

# Section – X
# TENDER FORM

Date_____

To

**Head (P&CD), HLL Lifecare Limited, Procurement and Consultancy Division, B-14 A, Sector - 62, Noida -201307, Uttar Pradesh**

Ref. Your TE document No. _____dated _____

We, the undersigned have examined the above mentioned TE document, including amendment/corrigendum No. _____, dated _____ (*if any*), the receipt of which is hereby confirmed. We now offer to supply and deliver_____ *(Description of goods and services)* in conformity with your above referred document for the sum of _____ (total tender amount in figures and words), as shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section - V – "Special Conditions of Contract", for due performance of the contract.

We agree to keep our tender valid for acceptance as required in the GIT clause 20, read with modification, if any in Section - III – "Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities.

We confirm that we fully agree to the terms and conditions specified in above mentioned TE document, including amendment/ corrigendum if any

**(Signature with date)**

**(Name and designation) Duly authorised to sign tender for and on behalf of**

# SECTION – XI PRICE SCHEDULE

## A) PRICE SCHEDULE FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA

| 1 | 2 | 3 | 4 | 5 | | | | | | | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Schedule | Brief Description of Goods | Country of Origin | Quantity (Nos.) | Price per unit (Rs.) | | | | | | | Total Price (at Consignee Site) basis (Rs.) |
| | | | | Ex - factory/ Ex -warehouse /Ex-showroom /Off - the shelf (a) | Excise Duty (if any) [%age & value] (b) | Sales Tax/ VAT(if any) [%age & value] (c) | Packing and Forwarding charges (d) | Inland Transportation, Insurance for a period including 3 months beyond date of delivery, loading/ unloading and Incidental costs till consignee's site (e) | Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site (f) | Unit Price (at Consignee Site) basis (g) =a+b+c+d+e+f | 4 x 5(g) |
| | | | | | | | | | | | |

Total Tender price in Rupees: _____

**In words:** _____

**Note: -**

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C

**Name**_____

**Business Address**_____

**Place: _____** **Signature of Tenderer**_____

**Date: _____** **Seal of the Tenderer**_____

## B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

| 1 | 2 | 3 | 4 | 5 | | | | | 6 |
|---|---|---|---|---|---|---|---|---|---|
| Schedule | Brief Description of Goods | Country of Origin | Quantity (Nos.) | Price per unit (Currency) | | | | | Total price on CIP Named Port of Destination + Insurance (local transportation and storage)<br><br>4X 5 (e) |
| | | | | FOB price at port/ airport of Lading<br><br>(a) | Freight & Insurance (port of loading to port of entry) and other Incidental costs<br><br>(b) | Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site<br>(c) | Extended Insurance (local transportation and storage) from port of entry to the consignee site for a period including 3 months beyond date of delivery**<br>(d) | Unit Price on CIP Named Port of Destination + Extended Insurance (local transportation and storage)<br><br>(e) = a+b+c+d | |
| | | | | | | | | | |

** To be paid in Indian Currency (Rs.)
Total Tender price in foreign currency: _____
In words: _____

**Note: -**

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C
3. The Tenderer will be fully responsible for the safe arrival of the goods at the named port of entry in good condition as per terms of CIP as per INCOTERMS, if applicable
4. Custom duty @ 10.76% and 2% C& F charges will be added to the CIP price to arrive at the DDP price for evaluation purpose.

**Indian Agent:**
**Indian Agency Commission - ___% of FOB**
**Signature of Tenderer_____**

**Name_____**
**Business Address_____**
**Signature of Tenderer_____**
**Seal of the Tenderer_____**

**Place: _____**
**Date: _____**

## C) PRICE SCHEDULE FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT AFTER WARRANTY PERIOD

| 1 | 2 | 3 | 4 | | | | | 5 |
|---|---|---|---|---|---|---|---|---|
| **Schedule No.** | **BRIEF DESCRIPTION OF GOODS** | **QUANTITY. (Nos.)** | **Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.** | | | | | **Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]** |
| | | | **1st** | **2nd** | **3rd** | **4th** | **5th** | |
| | | | **a** | **B** | **c** | **d** | **e** | |
| | | | | | | | | |
| | | | | | | | | |

*** After completion of Warranty period**

**NOTE:-**

1. In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.
2. The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years on yearly basis for complete equipment and Turnkey (if any).
3. The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
4. Cost of CMC will be added for Ranking/Evaluation purpose.
5. The payment of CMC will be made as per clause GCC clause 21.1 (D).
6. The uptime warranty will be 98 % on 24 (hrs) X 7 (days) X 365 (days) basis or as stated in Technical Specification of the TE document.
7. All software updates should be provided free of cost during CMC period.
8. The stipulations in Technical Specification will supersede above provisions
9. The supplier shall keep sufficient stock of spares required during Annual Comprehensive Maintenance Contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.

**Name**_____

**Business Address**_____

**Place:** _____ **Signature of Tenderer**_____

**Date:** _____ **Seal of the Tenderer**_____

**D) PRICE SCHEDULE FOR TURNKEY**

| Schedule No. | BRIEF TURNKEY DESCRIPTION OF GOODS | CONSIGNEE CODE | Turnkey price |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

**Note: -**

1. The cost of Turnkey as per Technical Specification (Section VII) may be quoted on lump sum along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
2. Cost of Turnkey will be added for Ranking/Evaluation purpose.
3. The payment of Turnkey will be made as per clause GCC clause 21.1 (c).
4. The stipulations in Technical Specification will supersede above provisions

**Name**_____

**Business Address**_____

**Place: _____** **Signature of Tenderer**_____

**Date: _____** **Seal of the Tenderer**_____

# SECTION – XII
# QUESTIONNAIRE

## Fill up the Section XX – Check List for Tenderers and enclose with the Tender

1. The tenderer should furnish specific answers to all the questions/issues mentioned in the Checklist. In case a question/issue does not apply to a tenderer, the same should be answered with the remark "not applicable".

2. Wherever necessary and applicable, the tenderer shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.

3. In case a tenderer furnishes a wrong or evasive answer against any of the question/issues mentioned in the Checklist, its tender will be liable to be ignored.

# SECTION – XIII

# BANK GUARANTEE FORM FOR EMD

Whereas _____ (hereinafter called the "Tenderer") has submitted its quotation dated _____ for the supply of _____ (hereinafter called the "tender") against the purchaser's tender enquiry No. _____ Know all persons by these presents that we _____ of _____ (Hereinafter called the "Bank") having our registered office at _____ are bound unto _____ (hereinafter called the "Purchaser) in the sum of _____ for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____day of _____ 20____. The conditions of this obligation are:

1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-

   fails or refuses to furnish the performance security for the due performance of the contract or
   fails or refuses to accept/execute the contract or
   if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).

This guarantee will remain in force for a period of forty-five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

……
(Signature with date of the authorised officer of the Bank)
……
Name and designation of the officer
……
……
Seal, name & address of the Bank and address of the Branch

# SECTION – XIV

## MANUFACTURER'S AUTHORISATION FORM

Head (P&CD),
HLL Lifecare Limited, Procurement and Consultancy Division
B-14 A, Sector -62, Noida -201307, Uttar Pradesh

Dear Sir,

Ref: Your TE document No _____ dated _____

We, _____ who are proven and reputable manufacturers of_____(*name and description of the goods offered in the tender*) having factories at_____, hereby authorise Messrs_____(*name and address of the agent*) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also state that we are not participating directly in this tender for the following reason(s):
_____*(please provide reason here).*

We further confirm that no supplier or firm or individual other than Messrs. _____ (*name and address of the above agent*) is authorised to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.
We also hereby extend our full warranty, CMC as applicable as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorised agent

We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"

Yours faithfully,

[*Signature with date, name and designation*]
for and on behalf of Messrs_____
[*Name & address of the manufacturers*]

*Note: 1. This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.*
*2. Original letter may be sent.*

# SECTION – XV

## BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

Head (P&CD),
HLL Lifecare Limited, Procurement and Consultancy Division
B-14 A, Sector -62, Noida -201307, Uttar Pradesh

WHEREAS _____ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no_____ dated _____ to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of. _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid up to 30 (thirty) months from the date of Notification of Award i.e. up to ---------- (indicate date)

…….
(Signature with date of the authorised officer of the Bank)
…….
Name and designation of the officer
…….
…….
Seal, name & address of the Bank and address of the Branch

# SECTION – XVI

# CONTRACT FORM - A

## CONTRACT FORM FOR SUPPLY, INSTALLATION, COMMISSIONING, HANDING OVER, TRIAL RUN, TRAINING OF OPERATORS & WARRANTY OF GOODS

(Address of the Purchaser's/Consignee's
office issuing the contract)

Contract No_____ dated_____

**This is in continuation to this office's Notification of Award No_____ dated _____**

1. Name & address of the Supplier: _____
2. Purchaser's TE document No_____ dated_____ and subsequent Amendment No_____, dated_____ (if any), issued by the purchaser
3. Supplier's Tender No_____ dated_____ and subsequent communication(s) No_____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this tender.
4. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:

   (i) General Conditions of Contract;
   (ii) Special Conditions of Contract;
   (iii) List of Requirements;
   (iv) Technical Specifications;
   (v) Quality Control Requirements;
   (vi) Tender Form furnished by the supplier;
   (vii) Price Schedule(s) furnished by the supplier in its tender;
   (viii) Manufacturers' Authorisation Form (if applicable for this tender);
   (ix) Purchaser's Notification of Award

   Note: The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under clause 1 of Section II – 'General Instructions to Tenderers' of the Purchaser's TE document shall also apply to this contract.
5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:
   (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

| Schedule No. | Brief description of goods/services | Accounting unit | Quantity to be supplied | Unit Price | Total price | Terms of delivery |
|---|---|---|---|---|---|---|
| | | | | | | |

Any other additional services (if applicable) and cost thereof: _____

Total value (in figure) _____ (In words) _____

(ii) Delivery schedule

(iii) Details of Performance Security

(iv) Quality Control

(a) Mode(s), stage(s) and place(s) of conducting inspections and tests.

(b) Designation and address of purchaser's inspecting officer

(v) Destination and despatch instructions

(vi) Consignee, including port consignee, if any

6. Warranty clause
7. Payment terms
8. Paying authority

_____

**(Signature, name and address**
**of the Purchaser's/Consignee's authorised official)**
**For and on behalf of_____**

Received and accepted this contract

(Signature, name and address of the supplier's executive
duly authorised to sign on behalf of the supplier)
For and on behalf of _____
(Name and address of the supplier)

(Seal of the supplier)
Date: _____

Place: _____

# CONTRACT FORM – B

## CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

**Annual CM Contract No._____ dated_____**
Between

(Address of Head of Hospital (AIIMS)
And

(Name & Address of the Supplier)

**Ref: Contract No_____ dated_____ (Contract No. & date of Contract for supply, installation, commissioning, handing over, Trial run, Training of operators & warranty of goods)**

In continuation to the above referred contract

2. The Contract of Annual Comprehensive Maintenance is hereby concluded as under: -

| 1 | 2 | 3 | 4 | | | | | 5 |
|---|---|---|---|---|---|---|---|---|
| **Schedule No.** | **BRIEF DESCRIPTION OF GOODS** | **QUANTITY. (Nos.)** | **Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.** | | | | | **Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]** |
| | | | **1st** | **2nd** | **3rd** | **4th** | **5th** | |
| | | | **a** | **b** | **c** | **d** | **e** | |
| | | | | | | | | |

Total value (in figure) _____ (In words) _____

b) The CMC commence from the date of expiry of all obligations under Warranty i.e. from_____ (date of expiry of Warranty) and will expire on _____ (date of expiry of CMC)

c) The cost of Annual Comprehensive Maintenance Contract (CMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years as contained in the above referred contract on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts, _____ & _____) and Turnkey (if any).

d) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.

e) During CMC period, the supplier shall visit at each consignee's site for preventive maintenance including testing and calibration as per the manufacturer's service/ technical/ operational manual. The supplier shall visit each consignee site as recommended in the manufacturer's manual, but at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.

f) All software updates should be provided free of cost during CMC.

g) The bank guarantee valid till _____ [(fill the date) 2 months after expiry of entire CMC period] for an amount of Rs. _____ [(fill amount) equivalent to 2.5 % of the cost of the equipment as per contract] shall be furnished in the prescribed format given in

Section XV of the TE document, along with the signed copy of Annual CMC within a period of 21 (twenty one) days of issue of Annual CMC failing which the proceeds of Performance Security shall be payable to the Purchaser/Consignee.

h) If there is any lapse in the performance of the CMC as per contract, the proceeds Annual CMC bank guarantee for an amount of Rs. _____ (equivalent to 2.5 % of the cost of the equipment as per contract) shall be payable to the Consignee.

i) **Payment terms:** The payment of Annual CMC will be made against the bills raised to the consignee by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the HOD concerned. The payment will be made in Indian Rupees.

j) **Paying authority:** _____ (name of the consignee i.e. Hospital (AIIMS) authorised official)

_____

**(Signature, name and address**
**of Hospital (AIIMS) authorised official)**
**For and on behalf of_____**

Received and accepted this contract

(Signature, name and address of the supplier's executive
duly authorised to sign on behalf of the supplier)
For and on behalf of _____
(Name and address of the supplier)

(Seal of the supplier)
Date: _____
Place: _____

## SECTION – XVII
## CONSIGNEE RECEIPT CERTIFICATE
**(To be given by consignee's authorized representative)**

The following store (s) has/have been received in good condition:

1) Contract No. & date :_____

2) Supplier's Name :_____

3) Consignee's Name & Address with telephone No. & Fax No. : _____

4) Name of the item supplied :_____

5) Quantity Supplied :_____

6) Date of Receipt by the Consignee :_____

7) Name and designation of Authorized Representative of Consignee :_____

8) Signature of Authorized Representative of Consignee with date :_____

9) Seal of the Consignee :_____

# SECTION – XVIII
## Proforma of Final Acceptance Certificate by the Consignee

**No_____** **Date_____**

**To**

M/s _____
_____
_____

Subject: Certificate of commissioning of equipment/plant.

This is to certify that the equipment(s)/plant(s) as detailed below has/have been received in good conditions along with all the standard and special accessories and a set of spares (subject to remarks in Para no.02) in accordance with the contract/technical specifications. The same has been installed and commissioned.

(a) Contract No_____ dated_____

(b) Description of the equipment(s)/plants: _____

(c) Equipment(s)/ plant(s) nos.:_____

(d) Quantity: _____

(e) Bill of Loading/Air Way Bill/Railway Receipt/ Goods Consignment Note no_____ dated _____

(f) Name of the vessel/Transporters:_____

(g) Name of the Consignee:_____

(h) Date of commissioning and proving test:_____

**Details of accessories/spares not yet supplied and recoveries to be made on that account.**

| Sl. No. | Description of Item | Quantity | Amount to be recovered |
|---|---|---|---|
| | | | |

The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment(s)/plant(s).

The supplier has fulfilled its contractual obligations satisfactorily ## or

The supplier has failed to fulfil its contractual obligations with regard to the following:

a) He has not adhered to the time schedule specified in the contract in dispatching the documents/ drawings pursuant to 'Technical Specifications'.
b) He has not supervised the commissioning of the equipment(s)/plant(s)in time, i.e. within the

period specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).

c) The supplier as specified in the contract has not done training of personnel.

The extent of delay for each of the activities to be performed by the supplier in terms of the contract is

The amount of recovery on account of non-supply of accessories and spares is given under Para no.02.

The amount of recovery on account of failure of the supplier to meet his contractual obligations is_____ (here indicate the amount).

*(Signature)*
*(Name)*
*(Designation with stamp)*

**## Explanatory notes for filling up the certificate:**

i) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specification'.

ii) He has supervised the commissioning of the equipment(s)/plant(s) in time, i.e. within the time specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).

iii) Training of personnel has been done by the supplier as specified in the contract.

iv) In the event of documents/drawings having not been supplied or installation and commissioning of the equipment(s)/plant(s) having been delayed on account of the supplier, the extent of delay should always be mentioned in clear terms.

# SECTION – XIX
# ANNEXURES

**Annexure 1**

## DETAILS OF SHIPPING ARRANGEMENT FOR LINER CARGOES IN RESPECT OF C & F/CIF/TURNKEY/F.O.R CONTRACTS FOR IMPORTS

**1. (a) SHIPMENT FROM PORTS OF U.K INCLUDING NORTHERN IRELAND (ALSO EIRE), FROM THE NORTH CONTINENT OF EUROPE (GERMANY, HOLLAND, BELGIUM, FRANCE, NORWAY, SWEDEN, DENMARK, FINLAND AND PORTS ON THE CONTINENTAL SEABOARD OF MEDITERRANIAN (I.E. FRENCH WESTERN ITALIAN PORTS), TO PORTS IN INDIA.**

The Seller should arrange shipment of the goods by vessels belonging to the member lines of the India-Pakistan-Bangladesh Conference. If the Seller finds that the space on the 'Conference Lines' vessels is not available for any specific shipment, he should take up with India-Pakistan-Bangladesh Conference. Conferity House, East Grinstead, Sussex (UK), for providing shipping space and also inform the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

The Seller should arrange shipment through the Government of India's Forwarding Agents, M/s Schenker & Co., 2000-Hamburg (Cable: SCHENKER CO., HAMBURG) OR obtain a certificate from them to the effect that shipment has been arranged in accordance with instructions of the Ministry of Surface Transport, (TRANSCHART), New Delhi.

**(b) SHIPMENT FORM PORTS OF U.K. INCLUDING NORTHERN**

Goods under this contract would be shipped by the national shipping companies of the Contracting Parties operating bilateral shipping service and vessels under the flag of third countries in accordance with the Agreement between the Government of German Democratic Republic and the Government of the Republic of India in the Field of Merchant Shipping signed on 9.1.1979, as amended up-to-date.

**(c) ISHIPMENT FROM ADRIATIC PORTS OF EASTERN ITALY AND YUGOSLAVIA**

The seller should arrange shipment of the goods by vessels belonging to the following Indian member lines;

1. The Shipping Purchaser of India Ltd.
2. The Scindia Steam Navigation Co., Ltd
3. India Steamship Co., Ltd

For the purpose of ascertaining the availability of suitable Indian vessels and granting dispensation in the event of their non-availability, the Seller should give adequate notice about the readiness of each consignment from time to time at least six weeks in advance of the required position to M/s Schenker & Co. 2000 HAMBURG (Cable: SCHENKER CO., HAMBURG) and also endorse a copy thereof to the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

The seller should arrange shipment through the Government of India's Forwarding Agents M/s Schenker & Co. 2000 HAMBURG (Cable: SCHENKER CO., HAMBURG) or obtain certificate from them to the effect that shipment has been arranged in accordance with the instructions of the Ministry of Surface Transport, (TRANSCHART), New Delhi.

**(d) SHIPMENT FROM POLAND & CZECHOSLOVAKIA**

(i) IMPORTS FROM POLAND

Shipment under this contract would be made by the National flag lines of the two parties and vessels of the third flag conference lines, in accordance with the agreement between the Govt. of the Republic of India and the Govt. of the Polish People's Republic regarding Shipping Co-operation dated 27.6.1960 as amended up-to-date.

(ii) IMPORTS FROM CZECHOSLOVAKIA

Goods under this contract would be signed by the National flag lines of the two parties and vessels of the third flag conference lines, in accordance with the Agreement Co-operation in shipping between India and Czechoslovakia signed on 3.11.1978 and ratified on 19.12.1979, as amended up-to-date.
Shipping arrangement should be made by the Sellers in consultation with Resident Representative of the Indian Shipping Lines in Gdynia, Co., Morska Agencja W. Gdyniul, Pulaskiego 8, P.O. Box 246, Gdynia (Poland) – Telex : MG PL. 054301, Tel.: 207621, to whom details regarding contract number, nature of cargo , quantity, port of lading, discharging, name of Government consignee, expected date of readiness of each consignment etc. should be furnish at least six weeks in advance of the required position, with a copy thereof endorsed to the Shipping Co-ordination Officer, Ministry of Surface Transport, (Chartering Wing), New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

**(e) SHIPMENT FROM U.S.S.R**

Shipment under this contract should be made in accordance with the agreement between the Government of the Republic of India and the Government of U.S.S.R on Merchant Shipping 1976, as amended up-to-date, by vessels of Indo-Soviet shipping Service.

**(f) SHIPMENT FROM JAPAN**

The shipment of goods should be made of India vessels to the maximum extent possible subject to the minimum of 50%.

The Seller should arrange shipment of the goods in consultation with the Embassy of India in Japan, Tokyo to whom details regarding contract number, nature of cargo, quantity, port of loading/discharge, name of Govt. consignee, expected date of readiness of each consignment etc. should be furnished at least six weeks in advance of the required position.

**Note:** The copies of such contracts are to be endorsed both to the Attached (commercial) embassy of India in Japan, Tokyo, and the shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi.

**(g) SHIPMENT FROM AUSTRALIA, ALGERIA, BULGARIA, ROMANIA, EGYPY**

The Seller shall arrange shipment of the goods by Indian flag vessels to the maximum extent possible subject to a minimum of 50 %. For the purpose of ascertaining the availability of suitable Indian vessels, the seller shall give adequate notice of not less than six weeks about the readiness of each consignment to the Shipping Purchaser of India Ltd., SHIPPING HOUSE, 245, Madame Cama Road, Bombay – 400 021 (CABLE: SHIPINDIA BOMBAY) and also endorse a copy thereof to the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

**(h) SHIPMENT FROM PAKISTAN**

The shipment of cargoes should be made by Indian vessels to the maximum extent possible subject to a minimum of 50 %.

Shipment arrangement should be made by the sellers in consultation with M/s Mogul Line Ltd., 16-Bank Street, Fort, Bombay – 400023 (Cable: MOGUL BOMBAY: Telex: 011 – 4049 MOGUL), to whom, details regarding contract number, nature of cargo, quantity, port of lading discharging, name of government consignee, expected date of readiness of each consignment etc. should be furnish at least six weeks in advance of the required position, with a copy thereof endorsed to the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

**(i) SHIPMENT FROM U.S ATLANTIC & GULF PORTS**

The Seller should arrange shipment of the goods by vessels belonging to the member lines of the India – Pakistan – Bangladesh – Ceylon and Burma Outward Freight Conference. If the Seller finds that the space of the 'Conference Lines' vessels is not available for any specific shipment he should take up with India – Pakistan- Bangladesh – Ceylon and Burma Outward Freight Conference, 19, Rector Street, New York, N.Y. 10006 USA, for providing shipping space and also inform the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

**(j) SHIPMENT FROM ST. LAWRENCE AN EASTERN CANADIAN PORTS**

The Seller should arrange shipment of the goods by vessels belonging to the following shipping lines;

1. The shipping Purchaser of India Ltd.
2. The Scindia Steam Navigation Co., Ltd

If the Seller finds that the space in the vessels of these Lines is not available for any particular consignments, he should inform the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159) immediately so that dispensation from the shipping lines concerned to use alternative lifting may be sought.

**(k) SHIPMENT FROM WEST COAST PORTS OF U.S.S CANADA AND OTHER AREAS NOT SPECIFICALLY MENTIONED ABOVE**

The Seller should arrange shipment of the goods by Indian vessels to the maximum extent possible subject to a minimum of 50 %. For the purpose of ascertaining the availability of suitable Indian vessels and granting dispensation in the event of their non-availability, the Seller should furnish the details regarding contract number, nature of cargo, quantity, port of lading, discharging, name of government consignee, expected date of readiness of each consignment etc. to the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159) at least six weeks in advance of the required position.

2. BILLS OF LADING

**(i) C.I.F./C&F/TURNKEY SHIPMENTS**

The Bills of lading should be drawn to indicate Shipper and 'Consignee' as under:

**SHIPPER:** The C.I.F (C&F)/TURNKEY SUPPLIERS concerned.

**CONSIGNEE:** As per consignee's particulars in the contract (The name an address of the 'Port Consignee' and 'Ultimate' both should be indicated).

**(ii) F.O.R SHIPMENTS**

The Bills of lading should be drawn to indicate shipper Consignee as under:

**SHIPPER:** The F.O.R suppliers Concerned

**CONSIGNEE:** Supplier's Indian Agent on order

## Note:

1. Moreover the name of the 'Purchaser' and 'Ultimate' Consignee should appear in the body of the Bills of Lading as the 'Notify' or as a remark.
2. Two non-negotiable copies of the Bills of Lading indicating the freight amount and discount, if any allowed, should be forwarded to The Shipping Co-ordination Officer, Ministry of surface Transport (Chartering Wing), New Delhi after the shipment of each consignment is effected.
3. The seller should avoid the use of over-aged vessels for the shipment of the goods under the contract and if so used the cost of additional. Insurance, if any, shall be borne by the seller.

# SECTION – XX
# CHECKLIST
# Name of Tenderer:
# Name of Manufacturer:

| Sl No. | Activity | Yes/ No/ NA | Page No. in the TE document | Remarks |
|---|---|---|---|---|
| 1. a. | Have you enclosed EMD of required amount for the quoted schedules? | | | |
| b. | In case EMD is furnished in the form of Bank Guarantee, has it been furnished as per Section XIII? | | | |
| c. | In case Bank Guarantee is furnished, have you kept its validity of 165 days from Techno Commercial Tender Opening date as per clause 19 of GIT? | | | |
| 2. a. | Have you enclosed duly filled Tender Form as per format in Section X? | | | |
| b. | Have you enclosed Power of Attorney in favour of the signatory? | | | |
| 3. | Are you a SSI unit, if yes have you enclosed certificate of registration issued by Directorate of Industries/NSIC | | | |
| 4. a. | Have you enclosed clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications? | | | |
| b. | In case of Technical deviations in the compliance statement, have you identified and marked the deviations? | | | |
| 5. a. | Have you submitted satisfactory performance certificate as per the Proforma for performance statement in Sec. IX of TE document in respect of all orders? | | | |

| Sl No. | Activity | Yes/ No/ NA | Page No. in the TE document | Remarks |
|---|---|---|---|---|
| b. | Have you submitted copy of the order(s) and end user certificate? | | | |
| 6. | Have you submitted manufacturer's authorization as per Section XIV? | | | |
| 7. | Have you submitted prices of goods, turnkey (if any), CMC etc. in the Price Schedule as per Section XI? | | | |
| 8. | Have you kept validity of 120 days from the Techno Commercial Tender Opening date as per the TE document? | | | |
| 9. a. | In case of Indian Tenderer, have you furnished Income Tax Account No. as allotted by the Income Tax Department of Government of India? | | | |
| b. | In case of Foreign Tenderer, have you furnished Income Tax Account No. of your Indian Agent as allotted by the Income Tax Department of Government of India? | | | |
| 10. | Have you intimated the name an full address of your Banker (s) along with your Account Number | | | |
| 11. | Have you fully accepted payment terms as per TE document? | | | |
| 12. | Have you fully accepted delivery period as per TE document? | | | |
| 13. | Have you submitted the certificate of incorporation? | | | |
| 14. | Have you accepted the warranty as per TE document? | | | |
| 15. | Have you accepted terms and conditions of TE document? | | | |

| Sl No. | Activity | Yes/ No/ NA | Page No. in the TE document | Remarks |
|---|---|---|---|---|
| 16. | Have you furnished documents establishing your eligibility & qualification criteria as per TE documents? | | | |
| 17 | Have you furnished Annual Report (Balance Sheet and Profit & Loss Account) for last three years prior to the date of Tender opening? | | | |

N.B.

1. All pages of the Tender should be page numbered and indexed.
2. The Tenderer may go through the checklist and ensure that all the documents/confirmations listed above are enclosed in the tender and no column is left blank. If any column is not applicable, it may be filled up as NA.

3. It is the responsibility of tendered to go through the TE document to ensure furnishing all required documents in addition to above, if any.

**(Signature with date)**

**(Full name, designation & address of the person duly authorised sign on behalf of the Tenderer)**
**For and on behalf of**

**(Name, address and stamp of the tendering firm)**

# Section – XXI
# Consignee List

| Consignee Code | Medical Institutions | Contact Address. | AirPort | Sea Port |
|---|---|---|---|---|
| Bhopal | All India Institute of Medical Science, Bhopal | The Director, All India Institute of Medical Science, Near Saket Nagar, Bhopal-462020 | NEW DELHI | KOLKATA |
| Bhubaneswar | All India Institute of Medical Science, Bhubaneswar | The Director, All India Institute of Medical Science, AIIMS-Bhubaneshwar, Near Biju Patnaik Police Academy, Village-Sijua, Bhubaneshwar-751019, Orissa | KOLKATA | KOLKATA |
| Jodhpur | All India Institute of Medical Science, Jodhpur | The Director, All India Institute of Medical Science, Basani Ph-2, Jodhpur-342005, Jodhpur | NEW DELHI | KANDLA |
| Patna | All India Institute of Medical Science, Patna | The Director, All India Institute of Medical Science, AIIMS-Patna, Phulwari Sharif, Infront of DAV School, WALMI, Danapur, Patna-801105, Bihar | KOLKATA | KOLKATA |
| Raipur | All India Institute of Medical Science, Raipur | The Director, All India Institute of Medical Science, AIIMS-Raipur, Old TB Hospital, Tatibandh, Raipur-492001, Chattisgarh | KOLKATA | KOLKATA |
| Rishikesh | All India Institute of Medical Science, Rishikesh | The Director, All India Institute of Medical Science, AIIMS-Rishikesh, Barrage Road, Pashulok, Rishikesh-249203, Uttarakhand | NEW DELHI | KANDLA |

**NB: The consignee will ensure timely issue of NMIC, CDEC, Octroi Exemption Certificates, Road Permits & Entry Tax Exemption Certificates, wherever applicable, to the suppliers.**